


Product Change Notification

| | | |
|--------------------------------|--|-----------------------------|
| PCN Date: | Mar 17, 2026 | |
| Supplier Name: | Pulse Electronics | |
| Pulse PCN No. | PCN-100000822 | |
| Description of Change | <p>The lead wire supplier Denggaoda will stop continuing supply, Pulse introduce new source supplier for the component of wire (051-42QS-MW85-N). The material and process are the same, with no impact on product form, fit, and function, and no change of product specifications.</p> <p>Wire supplier Suntek is qualified by Pulse in the year 2013.</p> | |
| Reason for Change | The lead wire supplier Denggaoda will stop business with Pulse. | |
| Summary of Changes | Old | New |
| | wire supplier: Denggaoda | wire supplier: Suntek |
| Traceability guidelines | By date code, traceability record can be provided upon request | |
| Qualification Data | <p>Pulse arranged the AEC-Q200 full qualification on AE3003H for wire 051-42QS-MW85-N, please refer to the attached qualification report.</p> <p style="text-align: center;"> AE3003H Qualification Test</p> | |
| Pulse Part Number | | PCN Effectivity Date |
| AE3003/AE3003H | | Sep 17, 2026 |

Customer: Generic
Originator: Keith Zhao

Phone: (86)-0816-7077888-2882
E-mail: Keith.zhao@yageo.com

Statement: Dear customer, please response this PCN requirement. If you have any special requirements, please let us know. Lack of response after 30 days will be considered acceptable of change.



Qualification Report _ AE3003H

PQ6.100.5886

Rev A: 3/19/2026



Prepared By:
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Pulse MPO QA Sr. Supervisor

Approved By:
Raymond Tan
Pulse MPO Quality Manager



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AE3003H Test Summary (Revision:A)

1. PURPOSE

This is an internal Pulse Qualification Plan to qualify the automotive part AE3003H material 051-42QS-MW85-N from Suntek.

Testing data will be reviewed after each environmental testing.

2. SCOPE

AE3003H is produced and tested in MPO.

3. REFERENCES

AE3003H released TLA documents Rev 10 and AEC-Q200 Rev E Table 5.

4. TEST SUMMARY AS BELOW:

| TEST Description | Reference | Sample size | Test conditions/Remarks | Result | Remarks |
|-------------------------------------|------------------------|-------------|---|-------------------------------|---|
| High Temperature Exposure (Storage) | MIL-STD-202 Method 108 | 77 | 1000 Hrs @ 125°C | Pass | Appendix 1 |
| Temperature Cycling | JESD22 Method JA-104 | 77 | 1000cycles (-40°C to 125°C) | Pass | Manual test open/short since it mouted onto PCB and couldn't disassembly. |
| Biased Humidity | MIL-STD-202 Method 103 | 77 | 1000 hours 85°C/85%RH. | Pass | |
| Operational Life | MIL-PRF-27 | 77 | 1000 hours 125°C with 50mA DC | Pass | |
| Terminal Strength | MIL-STD-202 Method 211 | 30 | Condition B, bent at 45degree. | Not applicable | |
| Resistance to Soldering Heat | MIL-STD-202 Method 210 | 30 | Condition K,3times Reflow tests, with 245°C Peak Temperature condition. | Pass | Appendix 2 |
| Solvent resistance | MIL-STD-202 Method 215 | 5 | It is applicable to marked and/or coated components. Add Aqueous wash chemical OKEMCLEAN(A 6% concentrated Oakite cleaner) or equivalent. | Not applicable. Laser marking | |

AE3003H Test Summary (Revision:A)

1. PURPOSE

This is an internal Pulse Qualification Plan to qualify the automotive part AE3003H material 051-42QS-MW85-N from Suntek.

Testing data will be reviewed after each environmental testing.

2. SCOPE

AE3003H is produced and tested in MPO.

3. REFERENCES

AE3003H released TLA documents Rev 10 and AEC-Q200 Rev E Table 5.

4. TEST SUMMARY AS BELOW:

| | | | | | |
|-----------------------------|------------------------|---|--|------|---|
| Solderability | J-STD-002 | 45 | Per J-STD-002E a) Method B, 4hrs @ 155°C dry heat @ 235 °C b) Method B @ 215°C category 3. c) Method D category 3 @ 260°C. | Pass | Appendix 3 |
| Mechanical Shock | MIL-STD-202 Method 213 | 30 | Figure 1 of Method 213. Condition C Use the Vibration sample to do this. | Pass | Manual test open/short since it mouted onto PCB and couldn't disassembly. |
| Vibration | MIL-STD-202 Method 204 | 30 | 5g's for 20 minutes, 12 cycles each of 3 orientations. Note: Use 8"X5" PCB, .031" thick, 7 secure points on one long side and 2 secure points at corners of opposite sides. Parts mouted within 2" from any secure point. Test from 10-2000 Hz. | | |
| Electrical Characterization | User Spec | 90 | Test OCL @-40°C,25°C,125°C | Pass | Appendix 4 |
| Terminal Strength (SMD) | AEC-Q200-006 | 30 | 1.8kg @60s holding | Pass | Appendix 5 |
| Board Flex | AEC-Q200-005 | 30 | 60 sec minimum holding time | Pass | Manual test open/short since it mouted onto PCB and couldn't disassembly. |
| Flammability | UL-94 | No exposed resin & plastic and the flammability is not applicable | | | |
| Physical Dimension | JESD22 Method JB-100 | 30 | Electrical Test not required | Pass | Appendix 6-7 |

Abbreviation in datasheet.

- DCR: Direct Current Resistance
- OPSH: Open / Short; for insulation
- TR: Turn Ratio
- P: Polarity
- OCL: Open Curent inductance
- RL: Return Loss
- CMR Common Mode Rejection
- DCMR Different to Common Mode Rejection

Appendix 1

AE3003H High Temperature Exposure 1000hrs

Electrical Test Data

| Parameter | DCR | DCR | OCL | OCL | TR | P | TR | P | OPSH |
|------------|--------|--------|--------------------------|--------------------------|--------|--------|---------|-----|--------|
| Condition: | normal | normal | 100 kHz, 100 mVRMS | 100 kHz, 100 mVRMS | normal | normal | normal | | |
| Pins | 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 1-4 | 2-3 | 2-3 | 1-2 |
| Unit | Ohms | Ohms | uH | uH | | | | | Mohms |
| HighLimit | 1.5 | 1.5 | | | 1.02 | | 1020 | | |
| LowLimit | | | 60 | 60 | 0.98 | | 980 | | 10 |
| Average = | 1.33 | 1.32 | 98.44 | 97.68 | 1.00 | | 996.83 | | 59.71 |
| STD DEV = | 0.03 | 0.02 | 5.90 | 5.84 | 0.00 | | 0.27 | | 1.54 |
| Cpu | 1.86 | 2.54 | | | 3.38 | | 28.58 | | |
| Cpl | | | 2.17 | 2.15 | 3.51 | | 20.76 | | 10.74 |
| Cpk | 1.86 | 2.54 | 2.17 | 2.15 | 3.38 | | 20.76 | | 10.74 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | 1.318 | 1.312 | 93.983 | 93.347 | 1 | + | 996.779 | + | 62.128 |
| 2 | 1.294 | 1.303 | 91.889 | 91.361 | 1 | + | 997.848 | + | 57.862 |
| 3 | 1.31 | 1.302 | 101.069 | 100.274 | 1 | + | 996.841 | + | 58.319 |
| 4 | 1.293 | 1.305 | 107.72 | 106.902 | 1 | + | 996.61 | + | 59.381 |
| 5 | 1.307 | 1.303 | 92.381 | 91.644 | 1 | + | 996.831 | + | 58.825 |
| 6 | 1.3 | 1.295 | 94.75 | 94.039 | 1 | + | 996.834 | + | 58.249 |
| 7 | 1.316 | 1.305 | 104.262 | 103.445 | 1 | + | 996.58 | + | 59.910 |
| 8 | 1.331 | 1.302 | 91.346 | 90.638 | 1 | + | 996.754 | + | 61.160 |
| 9 | 1.368 | 1.305 | 97.287 | 96.511 | 1 | + | 996.858 | + | 59.836 |
| 10 | 1.303 | 1.308 | 97.466 | 96.756 | 1 | + | 996.814 | + | 57.414 |
| 11 | 1.365 | 1.318 | 97.33 | 96.546 | 1.01 | + | 996.643 | + | 58.670 |
| 12 | 1.307 | 1.328 | 94.557 | 93.815 | 1 | + | 997 | + | 58.958 |
| 13 | 1.329 | 1.292 | 90.292 | 89.592 | 1 | + | 996.822 | + | 58.444 |
| 14 | 1.3 | 1.296 | 102.373 | 101.518 | 1 | + | 996.789 | + | 62.246 |
| 15 | 1.318 | 1.414 | 99.212 | 98.449 | 1 | + | 996.801 | + | 62.030 |
| 16 | 1.327 | 1.305 | 102.424 | 101.588 | 1 | + | 996.62 | + | 61.379 |
| 17 | 1.3 | 1.304 | 91.487 | 90.749 | 1 | + | 996.942 | + | 61.821 |
| 18 | 1.3 | 1.3 | 100.879 | 100.114 | 1 | + | 996.69 | + | 61.476 |
| 19 | 1.294 | 1.301 | 94.801 | 94.059 | 1 | + | 996.65 | + | 58.359 |
| 20 | 1.365 | 1.376 | 99.36 | 98.566 | 1 | + | 996.775 | + | 57.697 |
| 21 | 1.296 | 1.297 | 99.567 | 98.82 | 1 | + | 997.294 | + | 60.303 |
| 22 | 1.35 | 1.338 | 93.024 | 92.296 | 1 | + | 996.618 | + | 58.980 |
| 23 | 1.305 | 1.308 | 101.006 | 100.235 | 1 | + | 996.921 | + | 59.752 |
| 24 | 1.298 | 1.309 | 93.24 | 92.467 | 1 | + | 996.853 | + | 62.015 |
| 25 | 1.386 | 1.328 | 89.801 | 89.083 | 1 | + | 996.528 | + | 60.027 |
| 26 | 1.401 | 1.305 | 102.936 | 101.99 | 1 | + | 996.631 | + | 57.585 |
| 27 | 1.342 | 1.298 | 98.009 | 97.318 | 1 | + | 997.491 | + | 57.698 |
| 28 | 1.311 | 1.307 | 92.948 | 92.186 | 1 | + | 996.625 | + | 59.956 |
| 29 | 1.33 | 1.297 | 102.788 | 102.01 | 1 | + | 996.767 | + | 59.317 |
| 30 | 1.324 | 1.296 | 101.5 | 100.733 | 1 | + | 996.764 | + | 59.160 |
| 31 | 1.342 | 1.303 | 106.676 | 105.801 | 1 | + | 996.586 | + | 59.631 |
| 32 | 1.302 | 1.296 | 103.206 | 102.431 | 1 | + | 996.911 | + | 60.972 |
| 33 | 1.305 | 1.299 | 97.563 | 96.787 | 1.01 | + | 996.745 | + | 59.190 |
| 34 | 1.367 | 1.315 | 97.505 | 96.769 | 1.01 | + | 996.693 | + | 57.851 |
| 35 | 1.3 | 1.303 | 100.23 | 99.449 | 1 | + | 996.74 | + | 62.187 |
| 36 | 1.39 | 1.321 | 97.175 | 96.424 | 1 | + | 996.939 | + | 57.836 |
| 37 | 1.319 | 1.299 | 102.993 | 102.173 | 1 | + | 996.876 | + | 57.089 |
| 38 | 1.324 | 1.303 | 93.918 | 93.247 | 1 | + | 997.398 | + | 58.073 |
| 39 | 1.338 | 1.314 | 100.431 | 99.747 | 1 | + | 997.509 | + | 60.691 |
| 40 | 1.304 | 1.297 | 100.132 | 99.365 | 1 | + | 996.626 | + | 62.065 |
| 41 | 1.31 | 1.308 | 92.405 | 91.596 | 1 | + | 996.467 | + | 59.425 |
| 42 | 1.305 | 1.298 | 92.834 | 92.131 | 1 | + | 996.735 | + | 59.531 |
| 43 | 1.359 | 1.349 | 76.668 | 76.181 | 1 | + | 997.003 | + | 59.785 |
| 44 | 1.319 | 1.313 | 101.083 | 100.264 | 1 | + | 996.836 | + | 60.417 |
| 45 | 1.328 | 1.325 | 99.903 | 99.179 | 1 | + | 996.178 | + | 59.738 |
| 46 | 1.314 | 1.376 | 100.892 | 100.074 | 1 | + | 997.896 | + | 61.083 |
| 47 | 1.29 | 1.307 | 94.393 | 93.623 | 1 | + | 996.71 | + | 61.193 |

Appendix 1

AE3003H High Temperature Exposure 1000hrs

Electrical Test Data

| Parameter | DCR | DCR | OCL | OCL | TR | P | TR | P | OPSH |
|-------------------|--------|--------|--------------------------|--------------------------|--------|--------|---------|-----|--------|
| Condition: | normal | normal | 100 kHz, 100 mVRMS | 100 kHz, 100 mVRMS | normal | normal | normal | | |
| Pins | 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 1-4 | 2-3 | 2-3 | 1-2 |
| Unit | Ohms | Ohms | uH | uH | | | | | Mohms |
| HighLimit | 1.5 | 1.5 | | | 1.02 | | 1020 | | |
| LowLimit | | | 60 | 60 | 0.98 | | 980 | | 10 |
| Average = | 1.33 | 1.32 | 98.44 | 97.68 | 1.00 | | 996.83 | | 59.71 |
| STD DEV = | 0.03 | 0.02 | 5.90 | 5.84 | 0.00 | | 0.27 | | 1.54 |
| Cpu | 1.86 | 2.54 | | | 3.38 | | 28.58 | | |
| Cpl | | | 2.17 | 2.15 | 3.51 | | 20.76 | | 10.74 |
| Cpk | 1.86 | 2.54 | 2.17 | 2.15 | 3.38 | | 20.76 | | 10.74 |
| DATA | - | - | - | - | - | - | - | - | - |
| 48 | 1.305 | 1.318 | 98.213 | 97.481 | 1 | + | 996.936 | + | 60.749 |
| 49 | 1.304 | 1.301 | 101.458 | 100.664 | 1 | + | 996.586 | + | 60.866 |
| 50 | 1.317 | 1.297 | 100.963 | 100.197 | 1 | + | 996.802 | + | 62.064 |
| 51 | 1.325 | 1.356 | 101.896 | 101.114 | 1 | + | 997.076 | + | 58.918 |
| 52 | 1.305 | 1.311 | 93.906 | 93.199 | 1 | + | 996.693 | + | 59.222 |
| 53 | 1.385 | 1.326 | 93.157 | 92.423 | 1 | + | 996.922 | + | 58.299 |
| 54 | 1.308 | 1.297 | 102.544 | 101.756 | 1 | + | 996.845 | + | 58.798 |
| 55 | 1.322 | 1.372 | 109.048 | 108.249 | 1 | + | 996.699 | + | 57.472 |
| 56 | 1.315 | 1.31 | 96.252 | 95.532 | 1 | + | 996.812 | + | 57.379 |
| 57 | 1.303 | 1.299 | 100.518 | 99.759 | 1 | + | 996.787 | + | 59.829 |
| 58 | 1.311 | 1.3 | 97.678 | 96.952 | 1 | + | 996.827 | + | 57.268 |
| 59 | 1.328 | 1.314 | 99.314 | 98.528 | 1 | + | 996.629 | + | 61.372 |
| 60 | 1.324 | 1.306 | 100.097 | 99.37 | 1 | + | 996.719 | + | 61.882 |
| 61 | 1.346 | 1.339 | 97.749 | 97.016 | 1 | + | 996.884 | + | 60.832 |
| 62 | 1.312 | 1.319 | 106.992 | 106.133 | 1 | + | 996.656 | + | 59.839 |
| 63 | 1.313 | 1.312 | 103.52 | 102.692 | 1 | + | 996.533 | + | 59.587 |
| 64 | 1.329 | 1.377 | 104.736 | 103.955 | 1 | + | 996.756 | + | 59.080 |
| 65 | 1.299 | 1.315 | 97.899 | 97.127 | 1 | + | 996.804 | + | 57.592 |
| 66 | 1.305 | 1.307 | 107.341 | 106.436 | 1 | + | 996.683 | + | 58.609 |
| 67 | 1.392 | 1.352 | 104.264 | 103.44 | 1 | + | 996.814 | + | 57.084 |
| 68 | 1.309 | 1.304 | 91.569 | 90.818 | 1 | + | 996.712 | + | 62.181 |
| 69 | 1.335 | 1.302 | 77.586 | 77.081 | 1 | + | 997.078 | + | 59.199 |
| 70 | 1.297 | 1.362 | 91.053 | 90.395 | 1 | + | 997.262 | + | 61.373 |
| 71 | 1.393 | 1.317 | 103.599 | 102.77 | 1 | + | 996.811 | + | 62.320 |
| 72 | 1.391 | 1.324 | 101.231 | 100.426 | 1 | + | 996.753 | + | 61.361 |
| 73 | 1.402 | 1.307 | 101.799 | 101.027 | 1 | + | 996.995 | + | 59.347 |
| 74 | 1.298 | 1.303 | 101.741 | 100.904 | 1 | + | 996.9 | + | 57.690 |
| 75 | 1.298 | 1.31 | 105.537 | 104.774 | 1 | + | 996.983 | + | 59.104 |
| 76 | 1.307 | 1.317 | 110.763 | 109.899 | 1 | + | 996.72 | + | 61.871 |
| 77 | 1.416 | 1.378 | 99.779 | 98.992 | 1 | + | 996.688 | + | 60.896 |

| Parameter | RL | RL | RL | RL | RL | RL | RL | CMR | CMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 1MHZ | 10MHZ | 20MHZ | 30MHZ | 40MHZ | 50MHZ | 60MHZ | 1MHZ | 10MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -26 | -26 | -24 | -23 | -21 | -19.4 | -18 | -16 | -31.8 |
| Average = | -39.83 | -35.52 | -31.14 | -27.78 | -25.18 | -23.08 | -21.36 | -24.18 | -39.31 |
| STD DEV = | 1.38 | 0.86 | 0.52 | 0.40 | 0.35 | 0.32 | 0.29 | 0.30 | 0.36 |
| Cpu | | | | | | | | | |
| Cpl | 3.33 | 3.69 | 4.58 | 4.01 | 4.02 | 3.84 | 3.81 | 9.03 | 6.87 |
| Cpk | 3.33 | 3.69 | 4.58 | 4.01 | 4.02 | 3.84 | 3.81 | 9.03 | 6.87 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | -40.468 | -35.847 | -31.092 | -27.629 | -24.998 | -22.855 | -21.115 | -24.361 | -39.395 |
| 2 | -36.576 | -33.772 | -30.577 | -27.799 | -25.503 | -23.536 | -21.882 | -24.329 | -39.381 |
| 3 | -40.149 | -35.771 | -31.239 | -27.814 | -25.187 | -23.056 | -21.323 | -24.140 | -39.213 |
| 4 | -40.801 | -35.995 | -31.424 | -27.999 | -25.356 | -23.215 | -21.480 | -24.269 | -39.577 |
| 5 | -40.646 | -36.000 | -31.473 | -28.022 | -25.391 | -23.255 | -21.514 | -24.344 | -39.611 |
| 6 | -40.207 | -35.771 | -31.477 | -28.094 | -25.487 | -23.355 | -21.603 | -24.744 | -39.905 |
| 7 | -39.995 | -35.585 | -31.093 | -27.665 | -25.050 | -22.937 | -21.204 | -24.567 | -39.846 |
| 8 | -40.519 | -35.743 | -31.171 | -27.739 | -25.091 | -22.959 | -21.236 | -23.965 | -38.949 |
| 9 | -39.865 | -35.827 | -31.596 | -28.251 | -25.677 | -23.554 | -21.798 | -24.205 | -39.380 |
| 10 | -40.110 | -35.877 | -31.365 | -27.961 | -25.322 | -23.192 | -21.442 | -24.285 | -39.427 |
| 11 | -39.465 | -35.273 | -31.047 | -27.692 | -25.096 | -23.011 | -21.275 | -24.115 | -39.285 |
| 12 | -38.340 | -34.689 | -30.826 | -27.653 | -25.127 | -23.065 | -21.371 | -23.881 | -38.973 |
| 13 | -40.403 | -35.891 | -31.242 | -27.804 | -25.175 | -23.056 | -21.307 | -24.002 | -39.309 |
| 14 | -40.102 | -35.633 | -31.206 | -27.788 | -25.188 | -23.065 | -21.328 | -23.828 | -38.846 |
| 15 | -31.128 | -29.721 | -27.395 | -24.936 | -22.824 | -21.024 | -19.586 | -24.316 | -39.413 |
| 16 | -40.293 | -35.845 | -31.505 | -28.112 | -25.538 | -23.398 | -21.661 | -24.211 | -39.297 |
| 17 | -39.244 | -35.362 | -31.209 | -27.932 | -25.384 | -23.276 | -21.559 | -24.220 | -39.452 |
| 18 | -40.170 | -35.928 | -31.487 | -28.114 | -25.504 | -23.392 | -21.651 | -24.372 | -39.587 |
| 19 | -40.149 | -35.806 | -31.399 | -27.986 | -25.388 | -23.260 | -21.521 | -24.317 | -39.482 |
| 20 | -39.974 | -35.870 | -31.549 | -28.185 | -25.563 | -23.450 | -21.704 | -23.924 | -39.060 |
| 21 | -40.138 | -35.390 | -30.779 | -27.317 | -24.710 | -22.581 | -20.878 | -23.839 | -38.884 |
| 22 | -39.998 | -35.505 | -30.966 | -27.507 | -24.886 | -22.780 | -21.071 | -23.783 | -38.665 |
| 23 | -39.679 | -35.541 | -31.316 | -27.985 | -25.384 | -23.285 | -21.555 | -24.310 | -39.480 |
| 24 | -40.213 | -35.869 | -31.510 | -28.154 | -25.553 | -23.420 | -21.685 | -24.546 | -39.829 |
| 25 | -40.049 | -35.773 | -31.358 | -27.991 | -25.381 | -23.258 | -21.529 | -24.482 | -39.701 |
| 26 | -40.320 | -35.545 | -30.833 | -27.333 | -24.716 | -22.601 | -20.893 | -24.359 | -39.477 |
| 27 | -40.644 | -35.809 | -31.146 | -27.666 | -25.032 | -22.905 | -21.171 | -24.588 | -39.810 |
| 28 | -40.606 | -35.924 | -31.372 | -27.932 | -25.314 | -23.182 | -21.448 | -24.637 | -39.734 |
| 29 | -39.158 | -35.277 | -31.164 | -27.917 | -25.362 | -23.277 | -21.562 | -24.189 | -39.346 |
| 30 | -39.765 | -35.715 | -31.461 | -28.098 | -25.474 | -23.370 | -21.655 | -24.240 | -39.287 |
| 31 | -40.072 | -35.677 | -31.316 | -27.923 | -25.309 | -23.212 | -21.494 | -24.394 | -39.541 |
| 32 | -37.582 | -34.331 | -30.581 | -27.497 | -25.047 | -23.035 | -21.348 | -24.395 | -39.607 |
| 33 | -40.436 | -35.818 | -31.171 | -27.719 | -25.093 | -22.973 | -21.253 | -24.433 | -39.584 |
| 34 | -40.217 | -35.823 | -31.385 | -27.992 | -25.365 | -23.248 | -21.516 | -23.771 | -38.816 |
| 35 | -40.368 | -36.013 | -31.464 | -28.069 | -25.456 | -23.326 | -21.594 | -24.137 | -39.498 |
| 36 | -40.569 | -35.739 | -31.086 | -27.636 | -25.018 | -22.896 | -21.172 | -24.586 | -39.730 |
| 37 | -40.517 | -35.885 | -31.319 | -27.859 | -25.232 | -23.108 | -21.370 | -23.869 | -38.887 |
| 38 | -40.375 | -35.776 | -31.111 | -27.642 | -25.001 | -22.898 | -21.177 | -23.584 | -38.506 |
| 39 | -40.260 | -35.770 | -31.346 | -27.923 | -25.318 | -23.201 | -21.483 | -23.957 | -39.055 |
| 40 | -40.003 | -35.519 | -30.921 | -27.539 | -24.930 | -22.811 | -21.109 | -24.001 | -39.130 |
| 41 | -34.187 | -32.067 | -29.552 | -27.149 | -25.079 | -23.248 | -21.693 | -24.180 | -39.417 |
| 42 | -40.426 | -35.627 | -30.992 | -27.569 | -24.961 | -22.865 | -21.146 | -24.231 | -39.408 |
| 43 | -39.680 | -35.626 | -31.245 | -27.913 | -25.319 | -23.230 | -21.522 | -23.123 | -38.336 |
| 44 | -40.497 | -35.768 | -31.093 | -27.618 | -24.991 | -22.863 | -21.143 | -24.453 | -39.768 |
| 45 | -40.442 | -35.787 | -31.172 | -27.700 | -25.075 | -22.947 | -21.234 | -23.869 | -39.073 |
| 46 | -39.919 | -35.917 | -31.557 | -28.228 | -25.625 | -23.505 | -21.779 | -24.711 | -39.973 |
| 47 | -40.103 | -35.519 | -31.086 | -27.689 | -25.114 | -23.013 | -21.319 | -24.296 | -39.500 |

| Parameter | RL | RL | RL | RL | RL | RL | RL | CMR | CMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 1MHZ | 10MHZ | 20MHZ | 30MHZ | 40MHZ | 50MHZ | 60MHZ | 1MHZ | 10MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -26 | -26 | -24 | -23 | -21 | -19.4 | -18 | -16 | -31.8 |
| Average = | -39.83 | -35.52 | -31.14 | -27.78 | -25.18 | -23.08 | -21.36 | -24.18 | -39.31 |
| STD DEV = | 1.38 | 0.86 | 0.52 | 0.40 | 0.35 | 0.32 | 0.29 | 0.30 | 0.36 |
| Cpu | | | | | | | | | |
| Cpl | 3.33 | 3.69 | 4.58 | 4.01 | 4.02 | 3.84 | 3.81 | 9.03 | 6.87 |
| Cpk | 3.33 | 3.69 | 4.58 | 4.01 | 4.02 | 3.84 | 3.81 | 9.03 | 6.87 |
| DATA | - | - | - | - | - | - | - | - | - |
| 48 | -40.250 | -35.689 | -31.108 | -27.660 | -25.025 | -22.931 | -21.197 | -24.413 | -39.568 |
| 49 | -40.313 | -35.773 | -31.184 | -27.738 | -25.110 | -23.006 | -21.279 | -24.295 | -39.564 |
| 50 | -40.484 | -35.900 | -31.387 | -28.014 | -25.377 | -23.261 | -21.521 | -24.442 | -39.484 |
| 51 | -37.902 | -34.482 | -30.712 | -27.625 | -25.137 | -23.100 | -21.432 | -24.368 | -39.446 |
| 52 | -40.300 | -35.751 | -31.321 | -27.944 | -25.315 | -23.211 | -21.494 | -23.878 | -38.990 |
| 53 | -40.436 | -35.735 | -31.097 | -27.623 | -24.999 | -22.888 | -21.176 | -23.126 | -38.032 |
| 54 | -39.892 | -35.629 | -31.196 | -27.774 | -25.183 | -23.085 | -21.378 | -24.492 | -39.695 |
| 55 | -40.551 | -35.775 | -31.083 | -27.620 | -24.991 | -22.886 | -21.170 | -24.286 | -39.332 |
| 56 | -40.228 | -35.766 | -31.304 | -27.905 | -25.267 | -23.172 | -21.441 | -24.160 | -39.454 |
| 57 | -40.488 | -35.609 | -30.929 | -27.466 | -24.859 | -22.756 | -21.057 | -24.340 | -39.446 |
| 58 | -40.146 | -35.719 | -31.276 | -27.877 | -25.255 | -23.154 | -21.439 | -23.911 | -38.961 |
| 59 | -40.003 | -35.609 | -31.064 | -27.658 | -25.037 | -22.934 | -21.232 | -23.985 | -38.978 |
| 60 | -38.871 | -34.988 | -30.824 | -27.555 | -25.016 | -22.946 | -21.248 | -24.402 | -39.553 |
| 61 | -40.245 | -35.661 | -30.995 | -27.550 | -24.903 | -22.805 | -21.090 | -24.451 | -39.595 |
| 62 | -40.657 | -36.112 | -31.616 | -28.219 | -25.575 | -23.437 | -21.705 | -24.306 | -39.420 |
| 63 | -40.480 | -35.816 | -31.184 | -27.772 | -25.138 | -23.036 | -21.323 | -24.352 | -39.433 |
| 64 | -40.268 | -35.920 | -31.444 | -28.005 | -25.393 | -23.289 | -21.558 | -24.295 | -39.592 |
| 65 | -40.507 | -35.661 | -30.952 | -27.485 | -24.859 | -22.752 | -21.049 | -24.279 | -39.399 |
| 66 | -40.157 | -35.648 | -31.068 | -27.697 | -25.072 | -22.970 | -21.256 | -23.935 | -39.183 |
| 67 | -40.367 | -35.813 | -31.147 | -27.710 | -25.092 | -22.975 | -21.255 | -23.817 | -38.825 |
| 68 | -40.081 | -35.631 | -31.144 | -27.704 | -25.101 | -22.994 | -21.286 | -24.164 | -39.381 |
| 69 | -40.580 | -35.815 | -31.147 | -27.691 | -25.038 | -22.891 | -21.132 | -23.950 | -38.890 |
| 70 | -39.859 | -35.607 | -31.268 | -27.936 | -25.291 | -23.172 | -21.401 | -24.094 | -39.129 |
| 71 | -39.726 | -35.654 | -31.316 | -27.962 | -25.330 | -23.185 | -21.420 | -24.375 | -39.518 |
| 72 | -39.376 | -35.525 | -31.377 | -28.030 | -25.436 | -23.309 | -21.561 | -23.871 | -38.869 |
| 73 | -40.384 | -35.882 | -31.465 | -28.017 | -25.370 | -23.228 | -21.454 | -24.044 | -39.106 |
| 74 | -39.539 | -35.589 | -31.433 | -28.133 | -25.521 | -23.396 | -21.631 | -24.281 | -39.421 |
| 75 | -39.266 | -35.531 | -31.337 | -28.060 | -25.475 | -23.360 | -21.598 | -23.748 | -38.672 |
| 76 | -40.009 | -35.616 | -31.130 | -27.702 | -25.072 | -22.953 | -21.205 | -23.965 | -38.952 |
| 77 | -40.558 | -35.869 | -31.339 | -27.899 | -25.248 | -23.095 | -21.337 | -24.310 | -39.350 |

| Parameter | CMR | CMR | CMR | CMR | CMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 60MHZ | 100MHZ | 300MHZ | 600MHZ | 1000MHZ | 1MHZ | 10MHZ | 30MHZ | 50MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -38.4 | -41.4 | -31.9 | -32 | -38 | -65 | -65 | -60 | -56 |
| Average = | -50.08 | -53.38 | -46.67 | -60.21 | -47.43 | -81.96 | -82.30 | -75.87 | -67.57 |
| STD DEV = | 0.34 | 0.74 | 0.27 | 0.86 | 0.44 | 3.08 | 3.28 | 2.44 | 2.05 |
| Cpu | | | | | | | | | |
| Cpl | 11.40 | 5.41 | 18.35 | 10.98 | 7.15 | 1.84 | 1.76 | 2.16 | 1.88 |
| Cpk | 11.40 | 5.41 | 18.35 | 10.98 | 7.15 | 1.84 | 1.76 | 2.16 | 1.88 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | -49.832 | -52.655 | -46.664 | -60.128 | -47.483 | -78.965 | -79.097 | -72.472 | -68.654 |
| 2 | -50.156 | -53.485 | -46.490 | -59.789 | -47.298 | -85.712 | -79.883 | -73.463 | -66.626 |
| 3 | -50.179 | -53.587 | -46.288 | -60.759 | -46.835 | -86.236 | -85.108 | -74.510 | -65.435 |
| 4 | -50.507 | -53.916 | -46.409 | -59.782 | -46.814 | -80.409 | -85.711 | -73.876 | -71.012 |
| 5 | -50.145 | -53.298 | -46.802 | -59.687 | -48.072 | -86.001 | -83.673 | -79.782 | -71.064 |
| 6 | -50.185 | -53.043 | -46.859 | -61.390 | -47.432 | -79.825 | -85.921 | -73.786 | -71.225 |
| 7 | -50.638 | -54.242 | -46.590 | -59.831 | -47.560 | -84.093 | -78.844 | -74.669 | -65.146 |
| 8 | -49.511 | -52.087 | -46.669 | -59.279 | -48.643 | -78.281 | -84.103 | -77.827 | -67.507 |
| 9 | -50.262 | -53.593 | -46.374 | -60.938 | -46.761 | -85.428 | -86.479 | -72.087 | -65.167 |
| 10 | -50.428 | -53.679 | -46.352 | -60.778 | -46.917 | -82.736 | -81.416 | -77.853 | -68.615 |
| 11 | -50.302 | -53.818 | -46.982 | -59.090 | -48.095 | -78.041 | -78.388 | -72.020 | -66.638 |
| 12 | -49.561 | -52.338 | -46.912 | -61.413 | -47.293 | -86.150 | -83.252 | -79.273 | -66.499 |
| 13 | -50.104 | -53.501 | -47.262 | -60.670 | -47.564 | -83.541 | -79.690 | -77.842 | -66.528 |
| 14 | -49.594 | -52.865 | -46.585 | -61.163 | -48.017 | -86.792 | -76.876 | -72.610 | -65.845 |
| 15 | -49.776 | -52.571 | -47.031 | -60.463 | -47.650 | -79.293 | -81.926 | -72.024 | -68.987 |
| 16 | -50.202 | -53.680 | -46.905 | -60.147 | -47.406 | -78.361 | -81.920 | -73.995 | -64.582 |
| 17 | -50.744 | -55.051 | -46.361 | -59.371 | -47.271 | -79.759 | -82.038 | -77.366 | -68.339 |
| 18 | -50.594 | -54.524 | -46.473 | -59.788 | -47.888 | -81.096 | -80.212 | -79.492 | -65.997 |
| 19 | -50.536 | -54.378 | -46.887 | -58.619 | -47.901 | -86.316 | -84.766 | -75.342 | -67.963 |
| 20 | -50.098 | -53.706 | -46.347 | -61.114 | -47.395 | -82.965 | -83.468 | -74.228 | -70.869 |
| 21 | -50.331 | -54.856 | -46.757 | -60.326 | -47.775 | -86.435 | -77.783 | -73.394 | -69.428 |
| 22 | -49.557 | -53.246 | -47.241 | -58.914 | -47.482 | -85.675 | -78.928 | -77.326 | -69.921 |
| 23 | -50.178 | -53.674 | -47.401 | -57.760 | -48.231 | -80.356 | -86.025 | -75.655 | -68.284 |
| 24 | -50.821 | -54.856 | -46.906 | -59.565 | -46.933 | -78.733 | -84.272 | -78.680 | -71.173 |
| 25 | -50.558 | -54.412 | -46.515 | -59.518 | -46.918 | -85.005 | -87.047 | -79.435 | -66.195 |
| 26 | -50.117 | -53.095 | -46.731 | -61.186 | -47.209 | -79.629 | -78.531 | -74.396 | -67.575 |
| 27 | -49.823 | -52.041 | -46.564 | -62.157 | -47.254 | -78.190 | -76.879 | -76.397 | -64.554 |
| 28 | -50.385 | -53.851 | -46.764 | -60.219 | -47.361 | -87.084 | -83.296 | -74.480 | -66.870 |
| 29 | -50.141 | -53.582 | -46.631 | -61.194 | -47.198 | -87.227 | -80.531 | -78.419 | -67.515 |
| 30 | -50.236 | -53.880 | -46.208 | -61.145 | -46.654 | -80.140 | -85.916 | -77.550 | -69.462 |
| 31 | -50.502 | -54.360 | -46.721 | -59.561 | -47.094 | -84.863 | -82.904 | -79.404 | -70.076 |
| 32 | -50.212 | -53.745 | -47.128 | -59.581 | -47.056 | -83.819 | -81.728 | -78.214 | -67.479 |
| 33 | -50.017 | -52.448 | -46.668 | -59.973 | -47.156 | -85.083 | -83.133 | -78.590 | -65.931 |
| 34 | -49.566 | -52.428 | -46.183 | -62.227 | -47.332 | -80.264 | -82.997 | -79.962 | -67.022 |
| 35 | -50.717 | -54.725 | -46.755 | -60.178 | -47.085 | -78.468 | -82.889 | -74.592 | -64.619 |
| 36 | -50.176 | -53.712 | -46.840 | -59.629 | -47.206 | -85.351 | -77.078 | -78.135 | -65.194 |
| 37 | -49.757 | -52.763 | -46.337 | -60.643 | -47.072 | -80.510 | -77.036 | -79.200 | -70.944 |
| 38 | -49.546 | -52.951 | -46.797 | -59.829 | -47.504 | -78.993 | -79.384 | -73.225 | -66.189 |
| 39 | -50.142 | -53.423 | -46.483 | -59.748 | -46.881 | -83.457 | -78.372 | -75.457 | -68.591 |
| 40 | -49.717 | -52.268 | -46.574 | -61.615 | -47.126 | -86.942 | -86.564 | -73.102 | -68.095 |
| 41 | -50.055 | -53.131 | -46.468 | -59.453 | -48.038 | -79.597 | -84.340 | -75.233 | -66.069 |
| 42 | -50.318 | -53.516 | -46.361 | -61.622 | -47.504 | -78.664 | -78.450 | -75.124 | -67.775 |
| 43 | -50.082 | -54.161 | -46.688 | -59.318 | -46.845 | -87.146 | -79.624 | -79.387 | -70.640 |
| 44 | -50.571 | -54.434 | -46.698 | -60.365 | -47.089 | -81.014 | -81.685 | -71.751 | -65.274 |
| 45 | -50.068 | -53.714 | -46.867 | -60.304 | -47.252 | -80.662 | -83.800 | -76.985 | -67.477 |
| 46 | -50.511 | -53.331 | -46.255 | -60.624 | -47.053 | -84.688 | -86.400 | -76.823 | -64.621 |
| 47 | -50.191 | -53.375 | -46.680 | -59.452 | -47.715 | -83.185 | -81.618 | -75.498 | -65.445 |

| Parameter | CMR | CMR | CMR | CMR | CMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 60MHZ | 100MHZ | 300MHZ | 600MHZ | 1000MHZ | 1MHZ | 10MHZ | 30MHZ | 50MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -38.4 | -41.4 | -31.9 | -32 | -38 | -65 | -65 | -60 | -56 |
| Average = | -50.08 | -53.38 | -46.67 | -60.21 | -47.43 | -81.96 | -82.30 | -75.87 | -67.57 |
| STD DEV = | 0.34 | 0.74 | 0.27 | 0.86 | 0.44 | 3.08 | 3.28 | 2.44 | 2.05 |
| Cpu | | | | | | | | | |
| Cpl | 11.40 | 5.41 | 18.35 | 10.98 | 7.15 | 1.84 | 1.76 | 2.16 | 1.88 |
| Cpk | 11.40 | 5.41 | 18.35 | 10.98 | 7.15 | 1.84 | 1.76 | 2.16 | 1.88 |
| DATA | - | - | - | - | - | - | - | - | - |
| 48 | -50.224 | -53.248 | -46.665 | -59.532 | -46.892 | -79.351 | -87.185 | -76.545 | -70.457 |
| 49 | -50.147 | -52.819 | -46.524 | -61.159 | -46.906 | -81.904 | -86.919 | -74.412 | -70.538 |
| 50 | -50.097 | -53.262 | -47.106 | -59.428 | -47.785 | -80.448 | -78.299 | -73.845 | -68.870 |
| 51 | -49.767 | -52.104 | -46.638 | -60.955 | -47.068 | -78.353 | -87.095 | -72.469 | -68.066 |
| 52 | -50.175 | -54.028 | -47.057 | -58.996 | -47.358 | -76.631 | -85.335 | -78.162 | -70.985 |
| 53 | -49.291 | -52.271 | -46.540 | -60.731 | -47.356 | -81.067 | -80.095 | -77.673 | -67.411 |
| 54 | -49.866 | -52.351 | -46.600 | -59.938 | -47.621 | -79.259 | -79.015 | -74.358 | -67.582 |
| 55 | -49.622 | -52.083 | -46.705 | -60.588 | -47.521 | -79.060 | -85.521 | -78.296 | -66.658 |
| 56 | -50.412 | -53.655 | -46.171 | -61.755 | -46.798 | -82.075 | -83.388 | -72.386 | -64.714 |
| 57 | -50.364 | -53.568 | -46.253 | -60.173 | -46.698 | -79.960 | -82.827 | -77.816 | -65.516 |
| 58 | -49.881 | -53.689 | -46.685 | -59.565 | -47.554 | -79.914 | -80.584 | -75.117 | -65.125 |
| 59 | -49.909 | -53.457 | -46.627 | -60.576 | -47.411 | -80.983 | -87.225 | -78.186 | -66.803 |
| 60 | -50.167 | -53.358 | -46.916 | -60.227 | -47.444 | -79.355 | -77.229 | -74.167 | -70.876 |
| 61 | -50.352 | -53.735 | -46.568 | -60.155 | -47.092 | -81.071 | -84.658 | -78.628 | -70.093 |
| 62 | -50.033 | -53.612 | -46.962 | -59.092 | -47.882 | -87.192 | -85.143 | -77.726 | -65.842 |
| 63 | -50.053 | -53.186 | -46.919 | -59.393 | -47.798 | -85.726 | -79.540 | -77.720 | -71.008 |
| 64 | -50.438 | -53.632 | -46.440 | -60.018 | -47.586 | -80.670 | -86.960 | -72.713 | -70.000 |
| 65 | -49.501 | -51.213 | -46.503 | -62.479 | -47.320 | -83.289 | -77.048 | -74.167 | -66.103 |
| 66 | -49.928 | -52.962 | -46.839 | -60.037 | -48.480 | -86.404 | -78.930 | -76.547 | -67.295 |
| 67 | -49.761 | -52.806 | -46.499 | -61.200 | -47.637 | -76.881 | -85.927 | -72.467 | -66.385 |
| 68 | -50.056 | -53.139 | -46.792 | -60.342 | -47.056 | -81.709 | -78.273 | -73.105 | -69.442 |
| 69 | -49.548 | -52.569 | -46.662 | -59.572 | -47.934 | -81.090 | -76.941 | -73.182 | -68.021 |
| 70 | -49.695 | -52.843 | -46.724 | -60.062 | -47.478 | -78.109 | -86.660 | -73.796 | -65.511 |
| 71 | -49.877 | -52.932 | -46.420 | -59.392 | -48.360 | -86.018 | -82.500 | -78.082 | -64.638 |
| 72 | -49.813 | -54.004 | -46.417 | -60.452 | -47.095 | -80.641 | -85.979 | -73.607 | -66.504 |
| 73 | -49.843 | -53.746 | -46.472 | -60.162 | -47.380 | -78.635 | -86.820 | -75.141 | -67.881 |
| 74 | -49.949 | -53.328 | -46.763 | -59.845 | -47.914 | -82.580 | -80.865 | -80.179 | -66.547 |
| 75 | -49.369 | -53.191 | -47.317 | -60.234 | -48.066 | -77.801 | -79.868 | -74.069 | -69.507 |
| 76 | -49.890 | -53.601 | -46.959 | -59.820 | -47.958 | -78.848 | -87.208 | -76.879 | -64.962 |
| 77 | -50.238 | -54.193 | -46.558 | -60.190 | -47.960 | -85.068 | -83.083 | -79.696 | -64.571 |

| Parameter | DCMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|
| Condition: | 100MHZ | 200MHZ | 300MHZ | 500MHZ | 1000MHZ |
| Pins | | | | | |
| Unit | dB | dB | dB | dB | dB |
| HighLimit | | | | | |
| LowLimit | -50 | -40 | -35 | -30 | -25 |
| Average = | -63.29 | -53.62 | -56.44 | -52.75 | -53.59 |
| STD DEV = | 2.25 | 1.49 | 2.05 | 1.56 | 2.11 |
| Cpu | | | | | |
| Cpl | 1.97 | 3.06 | 3.48 | 4.85 | 4.52 |
| Cpk | 1.97 | 3.06 | 3.48 | 4.85 | 4.52 |
| DATA | - | - | - | - | - |
| 1 | -63.611 | -53.282 | -55.379 | -52.621 | -54.935 |
| 2 | -62.532 | -53.881 | -56.247 | -52.544 | -52.201 |
| 3 | -61.889 | -53.155 | -54.904 | -51.669 | -51.635 |
| 4 | -63.681 | -53.236 | -55.212 | -52.476 | -52.953 |
| 5 | -60.783 | -50.885 | -53.414 | -49.782 | -49.775 |
| 6 | -63.059 | -54.702 | -56.960 | -53.401 | -53.234 |
| 7 | -63.639 | -54.381 | -57.322 | -53.778 | -54.446 |
| 8 | -61.200 | -50.621 | -53.319 | -50.129 | -50.331 |
| 9 | -68.938 | -56.462 | -59.856 | -54.954 | -55.465 |
| 10 | -64.308 | -54.851 | -58.141 | -54.379 | -55.325 |
| 11 | -59.644 | -52.379 | -54.490 | -51.354 | -51.810 |
| 12 | -61.218 | -52.427 | -54.793 | -51.805 | -52.183 |
| 13 | -61.293 | -52.058 | -54.926 | -51.371 | -52.140 |
| 14 | -61.146 | -51.416 | -54.137 | -51.048 | -52.467 |
| 15 | -63.713 | -52.961 | -56.042 | -52.964 | -53.882 |
| 16 | -61.299 | -52.523 | -54.862 | -51.444 | -51.931 |
| 17 | -63.011 | -53.937 | -55.944 | -52.161 | -51.324 |
| 18 | -61.181 | -50.883 | -53.341 | -50.262 | -49.962 |
| 19 | -62.112 | -54.671 | -57.447 | -53.122 | -54.479 |
| 20 | -67.144 | -55.138 | -58.163 | -54.045 | -54.954 |
| 21 | -61.842 | -52.244 | -54.439 | -50.929 | -51.660 |
| 22 | -60.950 | -52.260 | -54.783 | -51.797 | -52.167 |
| 23 | -60.570 | -52.819 | -55.052 | -52.271 | -53.226 |
| 24 | -62.625 | -52.489 | -55.471 | -51.672 | -51.935 |
| 25 | -66.677 | -56.117 | -59.384 | -54.813 | -55.686 |
| 26 | -63.961 | -53.888 | -56.972 | -52.978 | -53.870 |
| 27 | -61.019 | -52.183 | -54.495 | -52.102 | -52.478 |
| 28 | -64.142 | -54.040 | -57.056 | -53.226 | -54.314 |
| 29 | -59.543 | -52.044 | -53.700 | -50.987 | -50.747 |
| 30 | -68.167 | -56.326 | -59.700 | -54.454 | -55.404 |
| 31 | -62.980 | -53.289 | -55.976 | -51.968 | -52.719 |
| 32 | -67.893 | -55.039 | -59.485 | -53.145 | -55.599 |
| 33 | -64.108 | -54.967 | -57.989 | -54.638 | -55.473 |
| 34 | -60.874 | -52.577 | -54.694 | -51.641 | -52.140 |
| 35 | -60.666 | -51.918 | -54.385 | -50.573 | -51.255 |
| 36 | -65.214 | -54.034 | -57.452 | -52.915 | -54.206 |
| 37 | -62.056 | -52.292 | -54.626 | -51.419 | -52.229 |
| 38 | -62.255 | -53.581 | -55.533 | -52.278 | -52.765 |
| 39 | -65.965 | -55.547 | -58.821 | -54.503 | -55.140 |
| 40 | -61.725 | -52.391 | -55.135 | -52.140 | -52.295 |
| 41 | -62.198 | -51.121 | -53.617 | -49.507 | -49.645 |
| 42 | -61.773 | -53.514 | -55.918 | -52.742 | -52.820 |
| 43 | -67.682 | -54.570 | -59.061 | -53.670 | -55.962 |
| 44 | -63.484 | -52.793 | -55.090 | -51.413 | -53.697 |
| 45 | -61.802 | -52.313 | -54.862 | -51.156 | -52.141 |
| 46 | -62.468 | -53.490 | -55.046 | -52.078 | -51.435 |
| 47 | -63.544 | -53.394 | -56.591 | -52.650 | -53.585 |

| Parameter | DCMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|
| Condition: | 100MHZ | 200MHZ | 300MHZ | 500MHZ | 1000MHZ |
| Pins | | | | | |
| Unit | dB | dB | dB | dB | dB |
| HighLimit | | | | | |
| LowLimit | -50 | -40 | -35 | -30 | -25 |
| Average = | -63.29 | -53.62 | -56.44 | -52.75 | -53.59 |
| STD DEV = | 2.25 | 1.49 | 2.05 | 1.56 | 2.11 |
| Cpu | | | | | |
| Cpl | 1.97 | 3.06 | 3.48 | 4.85 | 4.52 |
| Cpk | 1.97 | 3.06 | 3.48 | 4.85 | 4.52 |
| DATA | - | - | - | - | - |
| 48 | -64.512 | -54.807 | -58.146 | -54.160 | -54.518 |
| 49 | -64.297 | -54.743 | -57.978 | -53.870 | -54.591 |
| 50 | -60.979 | -53.122 | -55.318 | -51.841 | -51.963 |
| 51 | -62.161 | -52.282 | -54.498 | -51.640 | -51.945 |
| 52 | -68.357 | -55.375 | -61.122 | -55.274 | -58.392 |
| 53 | -63.646 | -53.776 | -56.922 | -53.278 | -54.683 |
| 54 | -64.329 | -55.983 | -58.843 | -55.392 | -55.494 |
| 55 | -62.236 | -52.368 | -54.947 | -51.832 | -54.520 |
| 56 | -66.858 | -55.908 | -59.341 | -55.269 | -56.233 |
| 57 | -66.436 | -56.186 | -60.316 | -55.987 | -57.283 |
| 58 | -62.775 | -52.698 | -55.675 | -51.381 | -53.057 |
| 59 | -62.872 | -53.472 | -56.359 | -52.286 | -53.246 |
| 60 | -62.437 | -52.294 | -55.515 | -51.341 | -51.921 |
| 61 | -63.742 | -53.272 | -55.771 | -51.888 | -51.960 |
| 62 | -62.674 | -52.200 | -54.657 | -50.623 | -51.151 |
| 63 | -66.409 | -56.447 | -59.839 | -56.024 | -58.137 |
| 64 | -65.770 | -55.140 | -56.587 | -54.159 | -56.766 |
| 65 | -60.757 | -52.673 | -54.649 | -52.193 | -52.619 |
| 66 | -67.398 | -55.738 | -60.375 | -55.532 | -58.715 |
| 67 | -67.541 | -55.084 | -59.509 | -54.752 | -57.493 |
| 68 | -64.315 | -54.289 | -57.588 | -52.995 | -53.593 |
| 69 | -62.545 | -54.552 | -57.016 | -54.658 | -54.712 |
| 70 | -63.209 | -53.187 | -56.503 | -52.800 | -54.193 |
| 71 | -59.783 | -52.883 | -55.051 | -53.049 | -53.141 |
| 72 | -61.665 | -53.028 | -55.028 | -51.898 | -52.455 |
| 73 | -64.181 | -52.859 | -55.396 | -51.966 | -52.224 |
| 74 | -60.809 | -53.245 | -55.712 | -52.768 | -53.528 |
| 75 | -62.993 | -54.228 | -56.601 | -52.619 | -53.714 |
| 76 | -63.420 | -54.395 | -57.062 | -53.801 | -54.069 |
| 77 | -62.289 | -57.703 | -63.093 | -57.125 | -60.248 |

Appendix 2

AE3003H Resistance To Soldering Heat Electrical Test Data

| Parameter | DCR | DCR | OCL | OCL | TR | P | TR | P | OPSH |
|-------------------|--------|--------|--------------------------|--------------------------|--------|--------|---------|-----|--------|
| Condition: | normal | normal | 100 kHz, 100 mVRMS | 100 kHz, 100 mVRMS | normal | normal | normal | | |
| Pins | 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 1-4 | 2-3 | 2-3 | 1-2 |
| Unit | Ohms | Ohms | uH | uH | | | | | Mohms |
| HighLimit | 1.5 | 1.5 | | | 1.02 | | 1020 | | |
| LowLimit | | | 60 | 60 | 0.98 | | 980 | | 10 |
| Average = | 1.31 | 1.41 | 92.38 | 91.83 | 1.00 | | 996.84 | | 60.28 |
| STD DEV = | 0.02 | 0.02 | 5.38 | 5.34 | 0.00 | | 0.28 | | 1.52 |
| Cpu | 3.31 | 1.75 | | | 3.65 | | 27.50 | | |
| Cpl | | | 2.01 | 1.99 | 3.78 | | 19.99 | | 11.03 |
| Cpk | 3.31 | 1.75 | 2.01 | 1.99 | 3.65 | | 19.99 | | 11.03 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | 1.289 | 1.405 | 97.582 | 97.037 | 1 | + | 996.924 | + | 59.338 |
| 2 | 1.288 | 1.402 | 96.369 | 95.872 | 1 | + | 997.643 | + | 62.978 |
| 3 | 1.298 | 1.407 | 84.945 | 84.487 | 1 | + | 996.934 | + | 60.297 |
| 4 | 1.31 | 1.416 | 89.509 | 88.976 | 1.01 | + | 996.426 | + | 61.041 |
| 5 | 1.338 | 1.421 | 82.733 | 82.24 | 1 | + | 996.957 | + | 61.163 |
| 6 | 1.362 | 1.422 | 92.277 | 91.739 | 1 | + | 996.757 | + | 61.334 |
| 7 | 1.337 | 1.421 | 97.451 | 96.85 | 1 | + | 996.537 | + | 58.138 |
| 8 | 1.333 | 1.415 | 94.27 | 93.696 | 1 | + | 996.449 | + | 61.940 |
| 9 | 1.321 | 1.431 | 94.488 | 93.995 | 1 | + | 997.291 | + | 60.326 |
| 10 | 1.3 | 1.4 | 94.943 | 94.388 | 1 | + | 996.745 | + | 59.769 |
| 11 | 1.315 | 1.481 | 88.681 | 88.194 | 1 | + | 997.301 | + | 60.047 |
| 12 | 1.315 | 1.398 | 82.174 | 81.686 | 1 | + | 997 | + | 62.620 |
| 13 | 1.338 | 1.418 | 93.52 | 92.993 | 1 | + | 996.795 | + | 61.774 |
| 14 | 1.303 | 1.414 | 92.269 | 91.716 | 1 | + | 996.85 | + | 61.437 |
| 15 | 1.297 | 1.402 | 102.03 | 101.416 | 1 | + | 996.891 | + | 58.285 |
| 16 | 1.29 | 1.391 | 99.443 | 98.836 | 1 | + | 996.833 | + | 58.561 |
| 17 | 1.289 | 1.394 | 95.799 | 95.169 | 1 | + | 996.663 | + | 57.892 |
| 18 | 1.286 | 1.393 | 86.7 | 86.155 | 1 | + | 996.806 | + | 59.844 |
| 19 | 1.298 | 1.406 | 89.981 | 89.473 | 1 | + | 997.349 | + | 59.516 |
| 20 | 1.299 | 1.403 | 85.093 | 84.583 | 1 | + | 996.926 | + | 59.473 |
| 21 | 1.288 | 1.395 | 94.374 | 93.791 | 1 | + | 996.383 | + | 60.675 |
| 22 | 1.299 | 1.403 | 100.078 | 99.492 | 1 | + | 996.87 | + | 61.359 |
| 23 | 1.302 | 1.403 | 89.009 | 88.455 | 1 | + | 996.68 | + | 57.138 |
| 24 | 1.293 | 1.4 | 88.121 | 87.578 | 1 | + | 996.858 | + | 59.562 |
| 25 | 1.315 | 1.432 | 88.518 | 88 | 1 | + | 996.901 | + | 60.920 |
| 26 | 1.288 | 1.4 | 94.855 | 94.241 | 1 | + | 996.535 | + | 59.494 |
| 27 | 1.291 | 1.395 | 102.144 | 101.475 | 1 | + | 996.599 | + | 62.152 |
| 28 | 1.322 | 1.414 | 88.759 | 88.209 | 1 | + | 996.543 | + | 62.975 |
| 29 | 1.292 | 1.401 | 97.052 | 96.46 | 1 | + | 996.788 | + | 58.205 |
| 30 | 1.28 | 1.395 | 88.101 | 87.568 | 1 | + | 996.797 | + | 60.170 |

| Parameter | RL | RL | RL | RL | RL | RL | RL | CMR | CMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 1MHZ | 10MHZ | 20MHZ | 30MHZ | 40MHZ | 50MHZ | 60MHZ | 1MHZ | 10MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -26 | -26 | -24 | -23 | -21 | -19.4 | -18 | -16 | -31.8 |
| Average = | -41.94 | -36.52 | -31.52 | -27.86 | -25.53 | -23.51 | -22.06 | -22.65 | -38.50 |
| STD DEV = | 0.93 | 0.43 | 0.27 | 0.24 | 0.22 | 0.21 | 0.21 | 0.72 | 0.39 |
| Cpu | | | | | | | | | |
| Cpl | 5.71 | 8.12 | 9.13 | 6.78 | 6.84 | 6.44 | 6.52 | 3.07 | 5.69 |
| Cpk | 5.71 | 8.12 | 9.13 | 6.78 | 6.84 | 6.44 | 6.52 | 3.07 | 5.69 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | -41.078 | -36.389 | -31.459 | -27.790 | -25.468 | -23.467 | -22.040 | -21.726 | -38.474 |
| 2 | -42.946 | -36.702 | -31.412 | -27.691 | -25.331 | -23.320 | -21.848 | -22.568 | -37.769 |
| 3 | -43.274 | -36.954 | -31.690 | -27.887 | -25.545 | -23.479 | -22.008 | -22.928 | -38.314 |
| 4 | -41.724 | -36.567 | -31.724 | -28.129 | -25.786 | -23.762 | -22.312 | -22.691 | -38.163 |
| 5 | -41.303 | -36.208 | -31.298 | -27.706 | -25.377 | -23.357 | -21.920 | -23.473 | -38.984 |
| 6 | -39.228 | -35.104 | -30.848 | -27.475 | -25.246 | -23.304 | -21.891 | -23.178 | -38.726 |
| 7 | -40.206 | -35.639 | -30.966 | -27.504 | -25.211 | -23.254 | -21.829 | -23.424 | -38.967 |
| 8 | -41.574 | -36.517 | -31.723 | -28.191 | -25.866 | -23.873 | -22.422 | -23.275 | -38.709 |
| 9 | -40.763 | -36.016 | -31.388 | -27.859 | -25.554 | -23.566 | -22.132 | -23.114 | -38.622 |
| 10 | -41.625 | -36.190 | -31.277 | -27.584 | -25.244 | -23.231 | -21.763 | -23.216 | -38.859 |
| 11 | -41.397 | -36.194 | -31.324 | -27.725 | -25.455 | -23.457 | -22.022 | -23.647 | -39.126 |
| 12 | -42.068 | -36.647 | -31.668 | -27.986 | -25.648 | -23.621 | -22.168 | -23.032 | -38.501 |
| 13 | -42.108 | -36.559 | -31.546 | -27.825 | -25.482 | -23.449 | -21.997 | -22.875 | -38.327 |
| 14 | -41.306 | -36.337 | -31.557 | -27.879 | -25.580 | -23.576 | -22.103 | -22.459 | -37.642 |
| 15 | -42.935 | -36.836 | -31.581 | -27.841 | -25.495 | -23.453 | -21.980 | -23.525 | -38.959 |
| 16 | -42.626 | -36.885 | -31.861 | -28.132 | -25.762 | -23.731 | -22.275 | -23.257 | -38.855 |
| 17 | -42.054 | -36.808 | -31.709 | -28.075 | -25.762 | -23.741 | -22.267 | -22.782 | -38.271 |
| 18 | -42.379 | -36.708 | -31.534 | -27.816 | -25.452 | -23.458 | -22.005 | -22.656 | -38.218 |
| 19 | -42.644 | -37.253 | -32.188 | -28.509 | -26.111 | -24.070 | -22.572 | -23.239 | -38.744 |
| 20 | -41.881 | -36.673 | -31.645 | -27.898 | -25.596 | -23.578 | -22.118 | -23.544 | -39.149 |
| 21 | -43.042 | -37.009 | -31.893 | -28.185 | -25.799 | -23.786 | -22.312 | -22.927 | -38.396 |
| 22 | -42.590 | -36.746 | -31.704 | -28.004 | -25.647 | -23.617 | -22.160 | -22.751 | -38.191 |
| 23 | -40.592 | -36.016 | -31.360 | -27.771 | -25.490 | -23.517 | -22.081 | -21.712 | -38.516 |
| 24 | -42.207 | -36.672 | -31.620 | -27.988 | -25.638 | -23.621 | -22.195 | -22.388 | -39.053 |
| 25 | -42.879 | -37.039 | -31.790 | -28.085 | -25.659 | -23.626 | -22.146 | -21.659 | -38.415 |
| 26 | -41.595 | -36.286 | -31.057 | -27.390 | -25.051 | -23.055 | -21.601 | -21.400 | -38.170 |
| 27 | -42.027 | -36.598 | -31.552 | -27.894 | -25.537 | -23.521 | -22.066 | -21.941 | -38.741 |
| 28 | -42.975 | -36.823 | -31.523 | -27.760 | -25.419 | -23.366 | -21.908 | -21.398 | -38.021 |
| 29 | -43.161 | -36.746 | -31.433 | -27.668 | -25.275 | -23.242 | -21.791 | -21.399 | -38.151 |
| 30 | -41.907 | -36.428 | -31.264 | -27.593 | -25.312 | -23.285 | -21.805 | -21.444 | -38.037 |

| Parameter | CMR | CMR | CMR | CMR | CMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Condition: | 60MHZ | 100MHZ | 300MHZ | 600MHZ | 1000MHZ | 1MHZ | 10MHZ | 30MHZ | 50MHZ |
| Pins | | | | | | | | | |
| Unit | dB | dB | dB | dB | dB | dB | dB | dB | dB |
| HighLimit | | | | | | | | | |
| LowLimit | -38.4 | -41.4 | -31.9 | -32 | -38 | -65 | -65 | -60 | -56 |
| Average = | -50.14 | -53.49 | -45.50 | -50.53 | -45.75 | -81.93 | -82.14 | -75.38 | -68.09 |
| STD DEV = | 0.66 | 1.23 | 2.25 | 2.09 | 0.58 | 2.84 | 2.88 | 1.98 | 2.13 |
| Cpu | | | | | | | | | |
| Cpl | 5.90 | 3.27 | 2.01 | 2.95 | 4.45 | 1.99 | 1.98 | 2.58 | 1.89 |
| Cpk | 5.90 | 3.27 | 2.01 | 2.95 | 4.45 | 1.99 | 1.98 | 2.58 | 1.89 |
| DATA | - | - | - | - | - | - | - | - | - |
| 1 | -49.424 | -51.891 | -41.889 | -47.533 | -45.449 | -81.332 | -86.896 | -77.008 | -67.777 |
| 2 | -50.157 | -54.110 | -46.818 | -51.931 | -45.921 | -76.740 | -80.269 | -76.991 | -65.820 |
| 3 | -50.467 | -54.249 | -47.118 | -51.495 | -46.571 | -85.215 | -82.336 | -74.592 | -66.560 |
| 4 | -50.579 | -54.245 | -46.989 | -51.358 | -46.395 | -79.269 | -80.155 | -75.067 | -70.420 |
| 5 | -50.567 | -54.140 | -46.774 | -52.173 | -45.707 | -80.231 | -78.132 | -78.603 | -68.029 |
| 6 | -50.710 | -54.248 | -46.694 | -52.033 | -45.893 | -85.385 | -85.321 | -77.758 | -65.431 |
| 7 | -50.665 | -54.616 | -47.000 | -52.792 | -45.782 | -81.162 | -86.348 | -71.848 | -68.271 |
| 8 | -50.444 | -54.577 | -47.474 | -52.530 | -46.365 | -81.629 | -86.577 | -76.095 | -66.065 |
| 9 | -50.605 | -54.173 | -47.079 | -51.786 | -45.678 | -84.621 | -77.868 | -75.234 | -64.985 |
| 10 | -50.752 | -54.373 | -46.767 | -52.041 | -45.527 | -82.584 | -82.566 | -71.960 | -65.991 |
| 11 | -50.660 | -54.129 | -47.207 | -51.971 | -46.055 | -77.602 | -81.743 | -73.475 | -66.245 |
| 12 | -50.587 | -54.253 | -46.969 | -51.244 | -46.044 | -78.423 | -83.940 | -74.822 | -70.411 |
| 13 | -50.634 | -54.357 | -46.678 | -51.994 | -45.616 | -82.970 | -81.729 | -73.014 | -65.319 |
| 14 | -50.097 | -54.485 | -47.203 | -52.880 | -46.165 | -80.597 | -84.387 | -75.755 | -70.345 |
| 15 | -50.563 | -53.984 | -47.161 | -51.574 | -45.999 | -76.821 | -83.403 | -79.583 | -68.922 |
| 16 | -50.673 | -54.264 | -47.037 | -51.561 | -46.299 | -84.741 | -79.022 | -72.715 | -67.769 |
| 17 | -50.612 | -54.540 | -46.911 | -52.103 | -45.772 | -81.241 | -82.451 | -74.510 | -68.164 |
| 18 | -50.742 | -54.516 | -46.677 | -51.520 | -46.253 | -77.764 | -84.063 | -72.205 | -70.540 |
| 19 | -50.550 | -54.248 | -47.130 | -51.253 | -46.058 | -86.107 | -78.894 | -74.856 | -70.944 |
| 20 | -50.838 | -54.304 | -46.885 | -51.517 | -45.527 | -86.261 | -80.889 | -76.051 | -68.514 |
| 21 | -50.338 | -54.020 | -46.968 | -51.600 | -45.704 | -80.224 | -78.748 | -76.984 | -70.589 |
| 22 | -50.330 | -54.175 | -46.887 | -51.857 | -45.600 | -83.154 | -83.930 | -76.602 | -71.143 |
| 23 | -49.032 | -51.338 | -41.949 | -46.659 | -45.232 | -87.201 | -86.990 | -76.870 | -70.715 |
| 24 | -49.424 | -51.528 | -42.312 | -47.250 | -45.573 | -84.458 | -80.793 | -76.412 | -68.587 |
| 25 | -49.260 | -51.559 | -41.832 | -47.387 | -45.807 | -81.406 | -80.352 | -77.015 | -68.790 |
| 26 | -49.158 | -51.580 | -42.323 | -47.682 | -43.189 | -79.952 | -78.725 | -73.212 | -71.162 |
| 27 | -49.350 | -51.525 | -42.005 | -46.686 | -45.138 | -80.784 | -77.422 | -75.529 | -64.844 |
| 28 | -48.717 | -51.644 | -42.244 | -48.274 | -45.913 | -83.912 | -82.687 | -73.901 | -66.043 |
| 29 | -49.321 | -51.936 | -41.939 | -47.575 | -45.524 | -83.625 | -80.808 | -78.181 | -64.747 |
| 30 | -48.870 | -51.623 | -42.180 | -47.695 | -45.775 | -82.340 | -86.762 | -74.568 | -69.663 |

| Parameter | DCMR | DCMR | DCMR | DCMR | DCMR |
|------------|---------|---------|---------|---------|---------|
| Condition: | 100MHZ | 200MHZ | 300MHZ | 500MHZ | 1000MHZ |
| Pins | | | | | |
| Unit | dB | dB | dB | dB | dB |
| HighLimit | | | | | |
| LowLimit | -50 | -40 | -35 | -30 | -25 |
| Average = | -64.26 | -54.68 | -58.28 | -52.33 | -56.86 |
| STD DEV = | 2.71 | 2.72 | 3.35 | 2.91 | 3.38 |
| Cpu | | | | | |
| Cpl | 1.76 | 1.80 | 2.31 | 2.56 | 3.14 |
| Cpk | 1.76 | 1.80 | 2.31 | 2.56 | 3.14 |
| DATA | - | - | - | - | - |
| 1 | -62.562 | -51.227 | -53.643 | -48.408 | -53.289 |
| 2 | -67.153 | -55.694 | -58.900 | -52.347 | -55.856 |
| 3 | -61.178 | -56.357 | -59.672 | -53.561 | -59.924 |
| 4 | -64.069 | -58.854 | -65.598 | -57.106 | -64.684 |
| 5 | -66.753 | -54.999 | -58.469 | -52.971 | -56.374 |
| 6 | -60.871 | -58.698 | -62.064 | -54.865 | -59.399 |
| 7 | -60.906 | -54.409 | -57.376 | -52.382 | -54.728 |
| 8 | -60.780 | -56.186 | -59.734 | -54.183 | -57.332 |
| 9 | -63.355 | -54.026 | -57.068 | -52.446 | -55.383 |
| 10 | -68.180 | -56.267 | -58.573 | -52.294 | -55.996 |
| 11 | -63.587 | -56.208 | -60.617 | -53.406 | -59.245 |
| 12 | -67.320 | -56.296 | -58.881 | -54.689 | -56.248 |
| 13 | -68.840 | -57.921 | -62.186 | -55.315 | -58.619 |
| 14 | -64.565 | -54.818 | -58.750 | -53.338 | -56.085 |
| 15 | -63.425 | -56.379 | -59.518 | -53.595 | -56.732 |
| 16 | -68.120 | -56.680 | -59.582 | -54.088 | -62.156 |
| 17 | -60.830 | -53.549 | -57.787 | -52.450 | -55.713 |
| 18 | -61.123 | -58.461 | -64.610 | -58.057 | -65.839 |
| 19 | -68.519 | -56.275 | -60.994 | -53.838 | -58.364 |
| 20 | -63.835 | -56.561 | -60.895 | -54.935 | -58.959 |
| 21 | -62.443 | -56.357 | -60.810 | -54.733 | -59.007 |
| 22 | -61.252 | -53.989 | -57.584 | -52.435 | -55.508 |
| 23 | -61.192 | -50.195 | -52.313 | -47.240 | -51.629 |
| 24 | -67.017 | -52.819 | -55.705 | -49.579 | -54.790 |
| 25 | -62.869 | -52.413 | -55.898 | -50.218 | -56.190 |
| 26 | -65.009 | -51.703 | -52.658 | -46.545 | -51.591 |
| 27 | -63.096 | -50.477 | -53.453 | -47.836 | -52.471 |
| 28 | -66.372 | -48.853 | -53.237 | -47.752 | -52.979 |
| 29 | -68.487 | -54.523 | -58.706 | -51.513 | -57.695 |
| 30 | -64.147 | -49.072 | -53.088 | -47.643 | -52.886 |

Appendix 3

AE3003H Solderability Report

| PULSE TEST REPORT | | | |
|----------------------------|-----------------------|---|------------------------------------|
| PRODUCT: AE3003H | REVISION: A | DATE: Feb 02 nd 2026 | PREPARED BY: Jufang Yang |

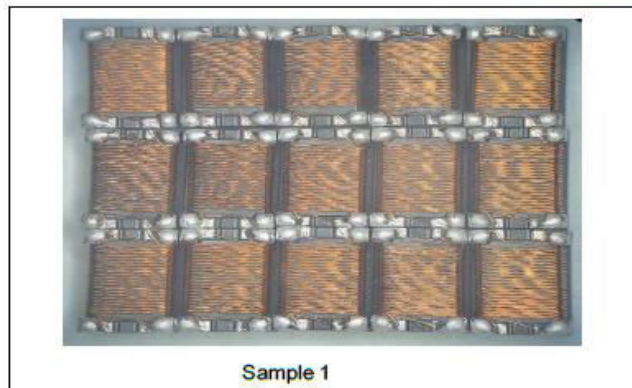
1. **TEST REQUIRED**
-Solderability Test

2. **SAMPLE SIZE**
-45units

3. **TEST CONDITION**
- Per J-STD-002E
 a) Method B, 4hrs @ 155°C dry heat @ 235°C
 b) Method B @ 215°C category 3.
 c) Method D category 3 @ 260°C.

4. **EQUIPMENT/INSTRUMENT USED**
 -2 gallon glass container with non corrosive basket
 -Solder pot
 -Microscope
 -Digital Thermometer

5. **TEST RESULT**
 -The test result is **PASS** as both sample test area grater than 95% smooth solver coverage and test pictures as below table.
 TABLE 1: result of a) Method B, 4hrs @ 155°C dry heat @ 235°C

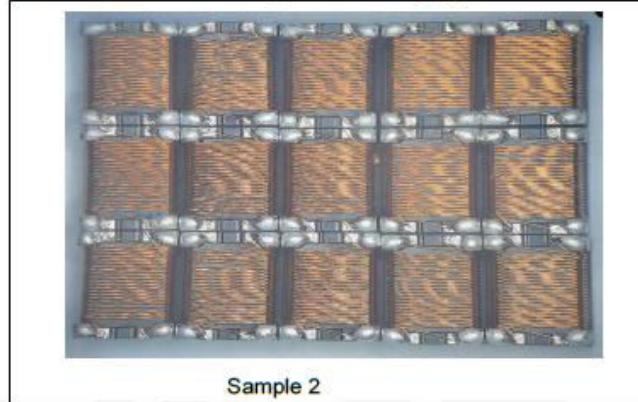


Export Process Zone, High-Tech Industrial Development Zone, Mianyang, Sichuan, PR China
 TEL#: (86-816)7077888-2012 FAX#(86)816 7077888-1008



Sampling partial view

TABLE 2: result of Method B @ 215°C category 3.

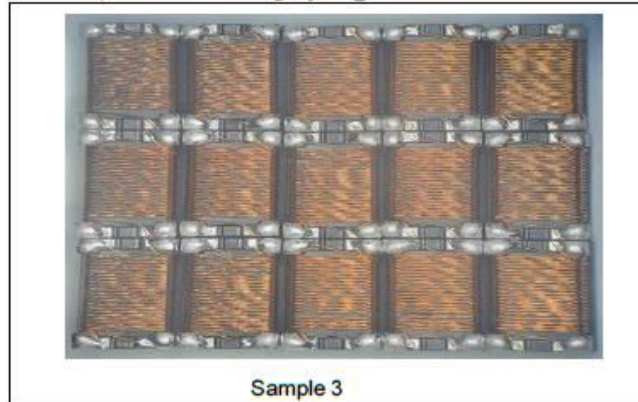


Sample 2



Sampling partial view

TABLE 3: result of c) Method D category 3 @ 260°C.



Sample 3

Export Process Zone, High-Tech Industrial Development Zone, Mianyang, Sichuan, PR China
TEL#: (86-816)7077888-2012 FAX#(86)816 7077888-1008



Sampling partial view

YAGEO GROUP
PIILSE

Prepared by: Jufang Yang
Pulse MPO Lab Technician



Reviewed by: Colin Zhang
Pulse MPO Lab Engineer

End of the Report
RELIABILITY LABORATORY

Export Process Zone, High-Tech Industrial Development Zone, Miayang, Sichuan, PR China
TEL#: (86-816)7077888-2012 FAX#(86)816 7077888-1008



Appendix 4

AE3003H Electrical Characterization Test Data

| Parameter | OCL of 1st lot | | | | | |
|------------|----------------|--------|-------|-------|--------|--------|
| | -40C | -40C | 25C | 25C | 125C | 125C |
| Condition: | -40C | -40C | 25C | 25C | 125C | 125C |
| Pins | 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 2-3 |
| Unit | uH | uH | uH | uH | uH | uH |
| HighLimit | | | | | | |
| LowLimit | 60 | 60 | 60 | 60 | 60 | 60 |
| Average = | 69.07 | 68.96 | 89.50 | 89.34 | 114.32 | 114.28 |
| STD DEV = | 1.52 | 1.69 | 3.72 | 3.66 | 6.07 | 5.97 |
| Cpu | | | | | | |
| Cpl | 1.99 | 1.76 | 2.64 | 2.67 | 2.99 | 3.03 |
| Cpk | 1.99 | 1.76 | 2.64 | 2.67 | 2.99 | 3.03 |
| DATA | - | - | - | - | - | - |
| 1 | 71.311 | 71.009 | 89.15 | 89.31 | 117.69 | 117.29 |
| 2 | 70.568 | 70.098 | 89.63 | 89.7 | 111.98 | 111.72 |
| 3 | 69.056 | 68.196 | 91.67 | 91.23 | 114.95 | 115.08 |
| 4 | 69.809 | 69.994 | 92.63 | 92.47 | 117.62 | 117.08 |
| 5 | 69.608 | 69.378 | 84.69 | 85.04 | 103.28 | 103.71 |
| 6 | 67.725 | 67.695 | 87.92 | 87.84 | 109.69 | 109.83 |
| 7 | 70.843 | 70.646 | 86.92 | 86.36 | 108.65 | 108.92 |
| 8 | 68.763 | 69.195 | 86.92 | 86.96 | 111.52 | 111.5 |
| 9 | 69.856 | 69.894 | 95.66 | 95.07 | 127.92 | 127.98 |
| 10 | 68.252 | 68.054 | 85.47 | 84.95 | 107.35 | 107.98 |
| 11 | 68.462 | 68.649 | 91.09 | 90.88 | 115.96 | 115.72 |
| 12 | 71.364 | 71.269 | 84.76 | 84.79 | 105.96 | 105.27 |
| 13 | 67.728 | 66.971 | 90.22 | 90.11 | 117.96 | 117.2 |
| 14 | 66.457 | 67.034 | 90.62 | 90.6 | 112.76 | 112.82 |
| 15 | 69.166 | 68.382 | 83.69 | 83.09 | 103.96 | 103.82 |
| 16 | 70.862 | 70.56 | 94.19 | 93.82 | 118.09 | 118.72 |
| 17 | 70.27 | 69.783 | 91.48 | 91.85 | 119.42 | 119.38 |
| 18 | 70.442 | 71.027 | 83.69 | 83.14 | 107.96 | 107.92 |
| 19 | 67.881 | 67.52 | 94.62 | 94.03 | 121.61 | 121.72 |
| 20 | 67.31 | 66.638 | 85.69 | 86.16 | 110.36 | 110.98 |
| 21 | 67.326 | 67.867 | 95.65 | 95.67 | 121.69 | 121.73 |
| 22 | 69.277 | 69.242 | 89.62 | 89.13 | 115.93 | 115.03 |
| 23 | 66.897 | 66.708 | 85.89 | 86.3 | 115.69 | 115.72 |
| 24 | 66.635 | 65.966 | 91.62 | 91.14 | 119.65 | 119.62 |
| 25 | 68.079 | 67.933 | 91.26 | 90.94 | 117.69 | 117.28 |
| 26 | 71.909 | 72.559 | 95.31 | 94.92 | 121.28 | 120.99 |
| 27 | 70.813 | 71.794 | 91.17 | 91.12 | 116.35 | 116.82 |
| 28 | 69.588 | 69.431 | 89.69 | 89.48 | 115.97 | 115.37 |
| 29 | 67.392 | 66.393 | 91.41 | 91.45 | 118.37 | 118.29 |
| 30 | 68.416 | 68.815 | 82.62 | 82.56 | 102.34 | 102.91 |

| OCL of 2nd lot | | | | | |
|----------------|--------|-------|-------|--------|--------|
| -40C | -40C | 25C | 25C | 125C | 125C |
| -40C | -40C | 25C | 25C | 125C | 125C |
| 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 2-3 |
| uH | uH | uH | uH | uH | uH |
| | | | | | |
| 60 | 60 | 60 | 60 | 60 | 60 |
| 68.76 | 68.79 | 89.00 | 89.00 | 115.43 | 115.38 |
| 1.50 | 1.50 | 3.80 | 3.85 | 5.95 | 5.96 |
| | | | | | |
| 1.95 | 1.95 | 2.55 | 2.51 | 3.10 | 3.10 |
| 1.95 | 1.95 | 2.55 | 2.51 | 3.10 | 3.10 |
| - | - | - | - | - | - |
| 71.214 | 69.866 | 89.97 | 90.09 | 112.71 | 112.65 |
| 70.318 | 69.691 | 83.47 | 83.08 | 105.62 | 105.42 |
| 70.332 | 70.208 | 90.72 | 90.36 | 114.65 | 114.89 |
| 67.702 | 68.422 | 92.74 | 93.21 | 116.01 | 115.96 |
| 68.921 | 68.772 | 90.58 | 90.89 | 114.32 | 114.62 |
| 67.574 | 68.282 | 89.37 | 89.08 | 113.26 | 113.75 |
| 69.374 | 69.345 | 93.72 | 93.83 | 119.32 | 119.76 |
| 68.799 | 68.519 | 87.38 | 87.85 | 109.07 | 109.07 |
| 69.102 | 68.983 | 91.79 | 92.07 | 112.27 | 111.95 |
| 70.573 | 70.6 | 90.45 | 89.95 | 109.01 | 109.23 |
| 67.188 | 67.55 | 87.64 | 87.53 | 114.8 | 114.35 |
| 68.722 | 67.893 | 83.03 | 83.19 | 120.19 | 120.15 |
| 70.989 | 71.843 | 87.88 | 87.95 | 107.71 | 107.2 |
| 67.016 | 66.109 | 88.97 | 88.63 | 126.31 | 126.18 |
| 70.473 | 71.178 | 92.21 | 92 | 122.5 | 122.82 |
| 66.416 | 66.943 | 84.17 | 84.21 | 108.08 | 107.85 |
| 66.874 | 66.728 | 89.38 | 88.8 | 124.06 | 123.74 |
| 69.423 | 69.715 | 95 | 95.31 | 110.46 | 110.17 |
| 67.71 | 67.212 | 82.72 | 82.83 | 115.97 | 116.14 |
| 66.656 | 67.422 | 83 | 83.39 | 121.66 | 121.31 |
| 69.283 | 68.662 | 87.58 | 87.92 | 122 | 121.87 |
| 70.691 | 70.535 | 94.93 | 94.71 | 113.1 | 113.04 |
| 70.919 | 71.782 | 83.8 | 83.23 | 111.92 | 112.35 |
| 69.71 | 70.512 | 91 | 91.4 | 106.24 | 105.88 |
| 67.39 | 67.976 | 93.08 | 93.25 | 125.12 | 125.04 |
| 66.605 | 67.283 | 84.73 | 84.35 | 111.84 | 111.89 |
| 69.039 | 68.215 | 86.06 | 86.41 | 118.41 | 118.23 |
| 69.238 | 68.519 | 87.02 | 87.02 | 110.55 | 110.77 |
| 68.176 | 67.653 | 94.56 | 94.71 | 124.78 | 124.49 |
| 66.502 | 67.253 | 93.01 | 92.88 | 120.98 | 120.74 |

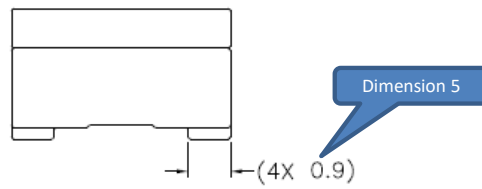
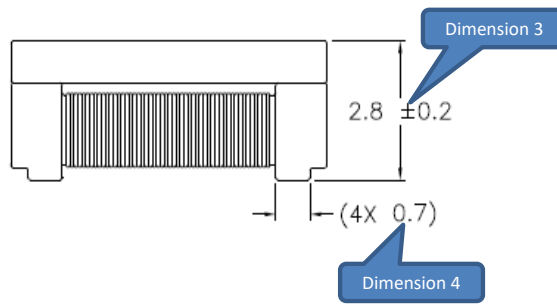
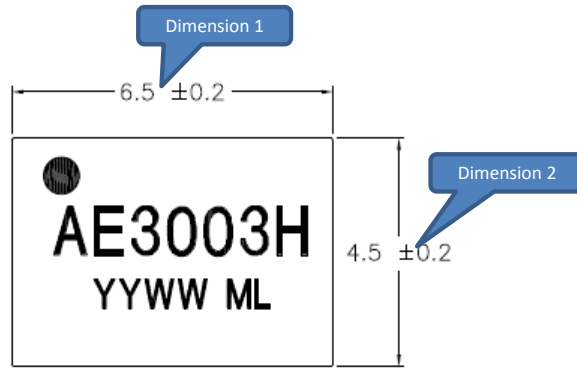
| OCL of 3rd lot | | | | | |
|----------------|--------|-------|-------|--------|--------|
| -40C | -40C | 25C | 25C | 125C | 125C |
| -40C | -40C | 25C | 25C | 125C | 125C |
| 1-4 | 2-3 | 1-4 | 2-3 | 1-4 | 2-3 |
| uH | uH | uH | uH | uH | uH |
| | | | | | |
| 60 | 60 | 60 | 60 | 60 | 60 |
| 68.94 | 69.22 | 88.96 | 88.87 | 116.90 | 116.84 |
| 1.47 | 1.59 | 4.30 | 4.16 | 6.35 | 6.25 |
| | | | | | |
| 2.02 | 1.93 | 2.25 | 2.31 | 2.99 | 3.03 |
| 2.02 | 1.93 | 2.25 | 2.31 | 2.99 | 3.03 |
| - | - | - | - | - | - |
| 69.907 | 71.688 | 85.22 | 85.53 | 123.78 | 123.33 |
| 71.875 | 67.964 | 89.88 | 89.3 | 110.89 | 111.12 |
| 67.639 | 67.019 | 85.85 | 86.13 | 125.89 | 125.48 |
| 67.945 | 65.967 | 89.54 | 89.94 | 113.31 | 113.37 |
| 67.128 | 70.829 | 94.76 | 94.91 | 123.35 | 122.96 |
| 70.321 | 70.553 | 95.16 | 94.66 | 123.62 | 123.47 |
| 66.859 | 67.864 | 93.01 | 92.53 | 123.62 | 123.74 |
| 68.481 | 69.932 | 87.71 | 87.34 | 123.78 | 123.4 |
| 69.97 | 67.183 | 93.27 | 93.36 | 115.39 | 115.79 |
| 68.756 | 67.662 | 83.47 | 83 | 108.85 | 109.03 |
| 67.954 | 70.795 | 83.78 | 83.54 | 120.12 | 119.74 |
| 69.929 | 69.916 | 93.85 | 93.85 | 116.56 | 116.63 |
| 70.252 | 70.592 | 86.53 | 86.2 | 108.41 | 108.1 |
| 66.864 | 69.812 | 86.37 | 86.68 | 119.9 | 120.19 |
| 69.493 | 71.531 | 92.15 | 91.55 | 119.18 | 118.71 |
| 69.354 | 67.379 | 85.18 | 85.37 | 126.31 | 126.18 |
| 68.441 | 68.739 | 83.01 | 83.05 | 107.23 | 107.28 |
| 70.858 | 70.281 | 82.59 | 82.76 | 107.61 | 108.1 |
| 71.423 | 71.961 | 85.42 | 85.68 | 119.18 | 119.06 |
| 67.296 | 68.791 | 90.81 | 90.7 | 106.53 | 106.33 |
| 69.939 | 70.639 | 93.22 | 93.12 | 109.68 | 109.52 |
| 67.162 | 68.783 | 84.86 | 85.02 | 121.64 | 121.54 |
| 68.78 | 69.856 | 83.89 | 83.95 | 122.1 | 122.24 |
| 69.769 | 68.589 | 89.24 | 89.03 | 110.15 | 110.37 |
| 70.779 | 67.586 | 95.02 | 94.83 | 117.1 | 117.37 |
| 68.81 | 70.111 | 84.2 | 84.44 | 116.74 | 116.83 |
| 67.76 | 67.24 | 87.87 | 88.07 | 111.84 | 111.7 |
| 66.589 | 68.086 | 94.87 | 94.34 | 112.1 | 111.93 |
| 67.28 | 68.028 | 92.5 | 92.07 | 127.33 | 127.01 |
| 70.612 | 71.151 | 95.42 | 95 | 114.89 | 114.77 |

Appendix 5

AE3003H Terminal Strength Test

| Specimens# | Test Condition | Test Result | Remark |
|------------|----------------------|-------------|--------|
| 1 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 2 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 3 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 4 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 5 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 6 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 7 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 8 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 9 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 10 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 11 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 12 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 13 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 14 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 15 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 16 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 17 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 18 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 19 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 20 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 21 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 22 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 23 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 24 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 25 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 26 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 27 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 28 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 29 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |
| 30 | 1.8kg/f @60s holding | <i>Pass</i> | N/A |

Appendix 6 AE3003H Dimension Drawing



Appendix 7

AE3003H Dimension Test Data

| Parameter | 1 | 2 | 3 | 4-1 | 4-2 | 4-3 | 4-4 | 5-1 | 5-2 | 5-3 | 5-4 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Unit | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| HighLimit | 6.7 | 4.7 | 3 | 0.8 | 0.8 | 0.8 | 0.8 | 1 | 1 | 1 | 1 |
| LowLimit | 6.3 | 4.3 | 2.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 |
| Average = | 6.50 | 4.48 | 2.81 | 0.70 | 0.69 | 0.70 | 0.70 | 0.91 | 0.91 | 0.91 | 0.91 |
| STD DEV = | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Cpu | 3.22 | 5.50 | 6.81 | 3.20 | 3.11 | 3.04 | 2.76 | 2.74 | 2.69 | 3.20 | 2.98 |
| Cpl | 3.36 | 4.32 | 7.25 | 2.97 | 2.74 | 2.78 | 2.57 | 3.13 | 3.13 | 3.71 | 3.38 |
| Cpk | 3.22 | 4.32 | 6.81 | 2.97 | 2.74 | 2.78 | 2.57 | 2.74 | 2.69 | 3.20 | 2.98 |
| DATA | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 6.53 | 4.49 | 2.8 | 0.68 | 0.71 | 0.71 | 0.68 | 0.91 | 0.92 | 0.9 | 0.91 |
| 2 | 6.48 | 4.46 | 2.81 | 0.7 | 0.68 | 0.69 | 0.68 | 0.92 | 0.91 | 0.9 | 0.89 |
| 3 | 6.47 | 4.5 | 2.79 | 0.7 | 0.7 | 0.71 | 0.71 | 0.91 | 0.92 | 0.92 | 0.91 |
| 4 | 6.48 | 4.48 | 2.82 | 0.69 | 0.69 | 0.7 | 0.68 | 0.92 | 0.89 | 0.9 | 0.92 |
| 5 | 6.52 | 4.48 | 2.81 | 0.71 | 0.7 | 0.68 | 0.69 | 0.9 | 0.91 | 0.92 | 0.89 |
| 6 | 6.49 | 4.46 | 2.79 | 0.71 | 0.68 | 0.68 | 0.71 | 0.92 | 0.91 | 0.9 | 0.91 |
| 7 | 6.48 | 4.46 | 2.8 | 0.71 | 0.69 | 0.69 | 0.71 | 0.89 | 0.89 | 0.91 | 0.92 |
| 8 | 6.5 | 4.5 | 2.8 | 0.7 | 0.69 | 0.69 | 0.71 | 0.92 | 0.92 | 0.89 | 0.9 |
| 9 | 6.53 | 4.48 | 2.81 | 0.71 | 0.71 | 0.69 | 0.71 | 0.89 | 0.89 | 0.91 | 0.91 |
| 10 | 6.51 | 4.46 | 2.81 | 0.69 | 0.69 | 0.7 | 0.71 | 0.92 | 0.91 | 0.92 | 0.91 |
| 11 | 6.53 | 4.47 | 2.81 | 0.71 | 0.69 | 0.69 | 0.7 | 0.92 | 0.89 | 0.92 | 0.89 |
| 12 | 6.53 | 4.49 | 2.8 | 0.7 | 0.69 | 0.69 | 0.68 | 0.92 | 0.91 | 0.89 | 0.89 |
| 13 | 6.51 | 4.47 | 2.81 | 0.68 | 0.68 | 0.71 | 0.68 | 0.91 | 0.91 | 0.91 | 0.89 |
| 14 | 6.51 | 4.49 | 2.81 | 0.71 | 0.68 | 0.71 | 0.71 | 0.9 | 0.89 | 0.9 | 0.92 |
| 15 | 6.48 | 4.46 | 2.8 | 0.69 | 0.68 | 0.69 | 0.7 | 0.9 | 0.9 | 0.91 | 0.91 |
| 16 | 6.52 | 4.49 | 2.81 | 0.68 | 0.71 | 0.71 | 0.68 | 0.89 | 0.92 | 0.91 | 0.92 |
| 17 | 6.5 | 4.48 | 2.82 | 0.69 | 0.7 | 0.7 | 0.71 | 0.89 | 0.89 | 0.92 | 0.9 |
| 18 | 6.47 | 4.48 | 2.8 | 0.68 | 0.68 | 0.71 | 0.7 | 0.9 | 0.91 | 0.9 | 0.92 |
| 19 | 6.52 | 4.46 | 2.82 | 0.69 | 0.71 | 0.68 | 0.7 | 0.9 | 0.92 | 0.91 | 0.9 |
| 20 | 6.53 | 4.48 | 2.82 | 0.7 | 0.71 | 0.68 | 0.71 | 0.92 | 0.9 | 0.9 | 0.92 |
| 21 | 6.5 | 4.46 | 2.79 | 0.7 | 0.71 | 0.69 | 0.68 | 0.92 | 0.92 | 0.92 | 0.9 |
| 22 | 6.47 | 4.46 | 2.82 | 0.71 | 0.71 | 0.7 | 0.71 | 0.9 | 0.92 | 0.92 | 0.91 |
| 23 | 6.5 | 4.49 | 2.8 | 0.7 | 0.69 | 0.7 | 0.68 | 0.91 | 0.92 | 0.89 | 0.91 |
| 24 | 6.51 | 4.5 | 2.8 | 0.7 | 0.69 | 0.71 | 0.71 | 0.89 | 0.92 | 0.92 | 0.9 |
| 25 | 6.48 | 4.47 | 2.81 | 0.68 | 0.7 | 0.68 | 0.7 | 0.89 | 0.9 | 0.9 | 0.9 |
| 26 | 6.49 | 4.47 | 2.8 | 0.71 | 0.7 | 0.68 | 0.69 | 0.92 | 0.91 | 0.91 | 0.92 |
| 27 | 6.52 | 4.47 | 2.81 | 0.69 | 0.68 | 0.7 | 0.68 | 0.91 | 0.91 | 0.91 | 0.9 |
| 28 | 6.51 | 4.47 | 2.81 | 0.69 | 0.68 | 0.71 | 0.69 | 0.91 | 0.91 | 0.9 | 0.9 |
| 29 | 6.52 | 4.46 | 2.82 | 0.68 | 0.68 | 0.68 | 0.7 | 0.9 | 0.89 | 0.9 | 0.9 |
| 30 | 6.53 | 4.49 | 2.79 | 0.7 | 0.7 | 0.71 | 0.69 | 0.9 | 0.92 | 0.91 | 0.92 |