

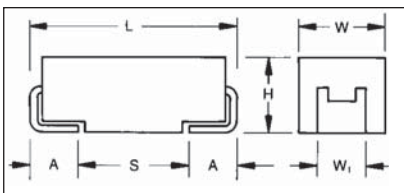
# THJ Series with Extension to 200°C



## High Temperature Tantalum Chip Capacitor



- SMD 200°C tantalum capacitor
- 200°C @ 0.33V<sub>R</sub> 1000hrs continuous operation
- Leakage current after 200°C 1000hrs less than 1mA
- 3x reflow 260°C
- Gold plated termination for hybrid assembly
- Oil drilling, aerospace, automotive applications
- CV range: 100-220µF / 10-16V



For part marking see page 130

### CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L±0.20 (0.008)	W±0.20 (0.008) -0.10 (0.004)	H±0.20 (0.008) -0.10 (0.004)	W <sub>1</sub> ±0.20 (0.008)	A±0.30 (0.012) -0.20 (0.008)	S Min.
E	2917	7343-43	7.30 (0.287)	4.30 (0.169)	4.10 (0.162)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
W <sub>1</sub> dimension applies to the termination width for A dimensional area only.								

### HOW TO ORDER

<b>THJ</b>	<b>E</b>	<b>107</b>	<b>*</b>	<b>016</b>	<b>A</b>	<b>JH</b>
<b>Type</b>	<b>Case Size</b> See table above	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Tolerance</b> K=±10% M=±20%	<b>Rated DC Voltage</b> 010=10Vdc 016=16Vdc	<b>Packaging</b> A = Gold Plating 7" Reel B = Gold Plating 13" Reel	<b>Standard Suffix</b>

### TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C		
Capacitance Range:	100 µF to 220 µF		
Capacitance Tolerance:	±10%; ±20%		
Leakage Current DCL @ V <sub>R</sub> 25°C	0.01CV		
Leakage Current DCL @ V <sub>C</sub> 200°C, 1000 hrs	1mA		
Rated Voltage (V <sub>R</sub> )	≤ +85°C:	10	16
Category Voltage (V <sub>C</sub> )	≤ +200°C:	3.3	5.3
Surge Voltage (V <sub>S</sub> )	≤ +85°C:	13	20
Surge Voltage (V <sub>S</sub> )	≤ +200°C:	4.3	6.5
Temperature Range:	-55°C up 200°C with voltage derating		
Reliability:	0.5% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series impedance, 1000 hrs at 200°C, 0.33V <sub>R</sub>		
Termination Finished:	Gold Plating Meets requirements of AEC-Q200		



# THJ Series with Extension to 200°C



## High Temperature Tantalum Chip Capacitor

### CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated voltage (V <sub>R</sub> ) to 85°C (Voltage Code)						
μF	Code	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
10	106			B				
15	156							
22	226							
33	336							
47	476							
68	686							
100	107			E				
150	157		E					
220	227							
330	337							
470	477							
680	687							

Available Ratings

Engineering samples - please contact manufacturer

\*Codes under development – subject to change

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards

### RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Cap (μF)	Rated Voltage (V)	DCL (μA) Max. @ V <sub>R</sub> 25°C	DCL (mA) Max. @ V <sub>C</sub> 200°C 1000hrs	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)				100kHz RMS Voltage (mV)			
									25°C	85°C	175°C	200°C	25°C	85°C	175°C	200°C
<b>10 Volt @ 85°C (3.3 Volt @ 200°C)</b>																
THJE227*010#JH	E	220	10	22	1.0	10	0.25	1	812	731	162	81	203	183	41	20
<b>16 Volt @ 85°C (5.3 Volt @ 200°C)</b>																
THJB106*016#JH	B	10	16	1.6	1.0	6	2.8	1	174	157	35	17	488	439	98	49
THJE107*016#JH	E	100	16	16	1.0	8	0.25	1	812	731	162	81	203	183	41	20

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

For typical weight and composition see page 123.

**NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.**

