

Thin Film - DC to 18 GHz EW Series Gain Equalizers

Description

DLI's Gain Equalizers are designed as a small, low cost solution to your gain slope challenges. DLI's EW Series is designed to address this issue from DC to 18 GHz in a package smaller than an 0302 capacitor. Components are designed for surface mount pick and place equipment or epoxy mount.

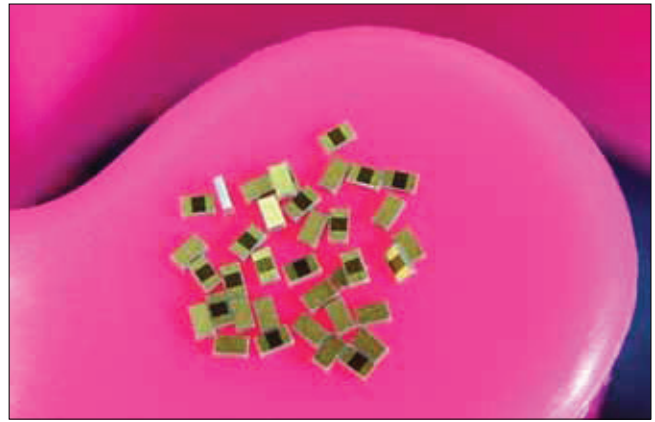
Available in tape and reel packaging for high volume applications.

Applications

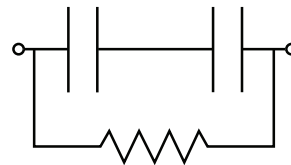
- Broadband Microwave Modules; EW, ECM, ECCM
- Equalizer is utilized as a compensation circuit to correct for loss slope created by other circuit elements such as amplifiers

Benefits

- Footprint interchangeable part series, gain slopes from 1 to 3.5 dB
- Superior, repeatable microwave performance
- Ease of assembly; terminations are compatible with solder SMT and conductive epoxy assembly
- Package optimized for typical 50 Ω transmission line width
- No ground connection required



Equivalent Schematic Representation

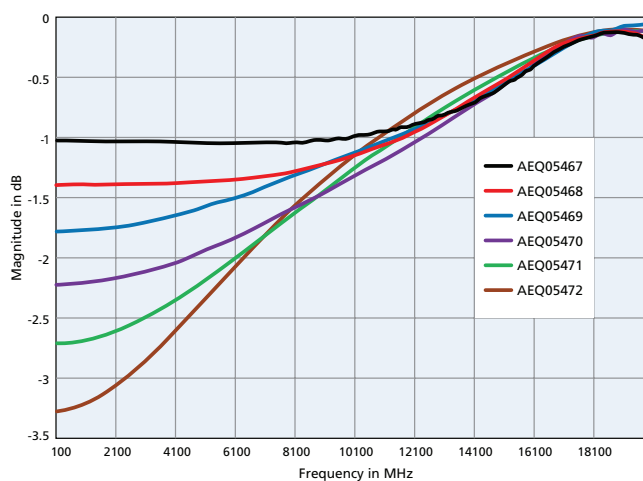


Part Numbers - DC to 18 GHz EW Series Gain Equalizers

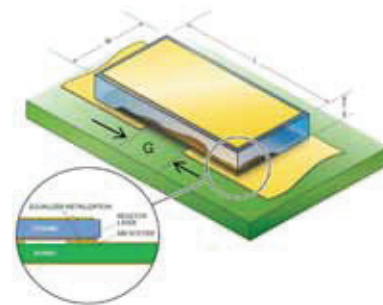
Part Number	L	W	T	Lp	Wp	G	Attach method	Nominal Slope
AEQ05467	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	1.0 dB
AEQ05468	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	1.5 dB
AEQ05469	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	2.0 dB
AEQ05470	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	2.5 dB
AEQ05471	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	3.0 dB
AEQ05472	28 ± 1	16 ± 1	7 ± 1	7 min.	14 ± 1	10	Solder/Epoxy	3.5 dB

All dimensions in mils

Typical Performance



Die Attach Recommendations



- 1) Equalizer width should be approximately as wide as 50 Ω line trace on PCB.
- 2) The gap in the microstrip line should be nominally equal to dimension G.
- 3) Vacuum pick-up tool recommended for component handling. If pressure is to be applied during component placement, it should be done uniformly across the part.
- 4) Thin, unmounted circuit boards are prone to warpage during reflow. This can cause solder attach defects and cracking of components during handling or subsequent housing installation.