DIELECTRIC LABORATORIES

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.

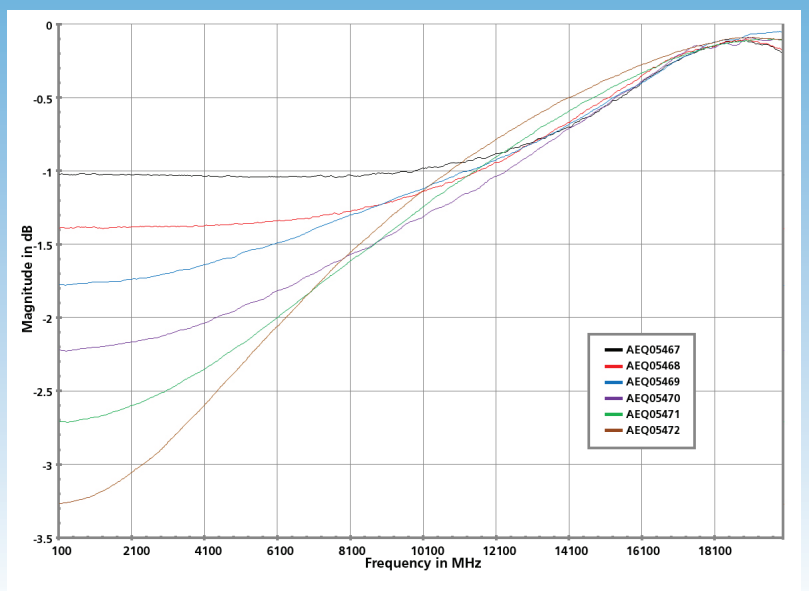
Applications

- 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

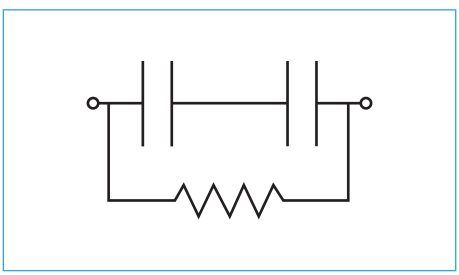
Benefits

- 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 & conductive epoxy assembly
- Package optimized for typical 50 Ω transmission line width
- No ground connection required

Typical Performance



Equivalent Schematic Representation



knowles®

www.knowlescapacitors.com

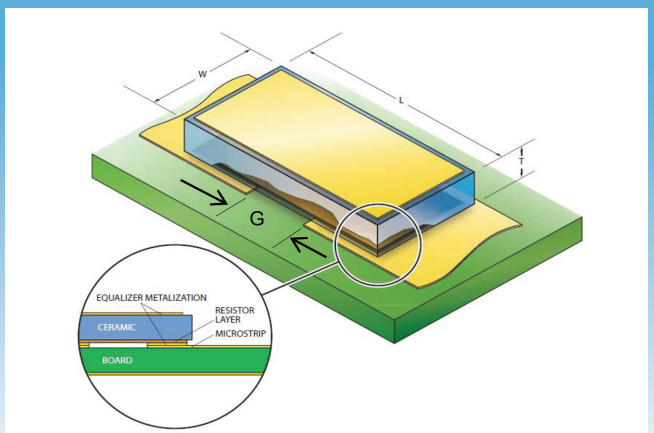
Part Numbers - DC to 18 GHz EW Series Gain Equalizers

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

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.



Custom Solutions

We realize that our standard offerings won't meet all customer requirements. DLI offers custom solutions with quick turn time.

Custom designs will be tailored to meet your system requirements by utilizing a design with one of our high K materials.

Temperature performance requirement? We can design on one of DLI's temperature stable materials.

Please contact Applications Engineering for more information.

Qualifications

ISO 9001 QMI-SAI Global

AS 9100 QMI-SAI Global

RoHS 2011/65/EU Lead Free

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