



# Gain Equalizers



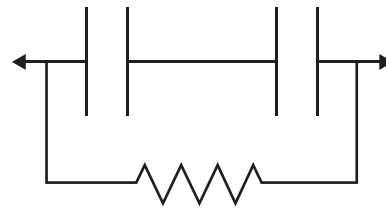
### Functional Applications:

- Equalizer is utilized as a compensation circuit to correct for a loss slope created by other elements within a circuit [such as in amplifier stages].
- Used with SONET modules in conjunction with DC blocking capacitors adjacent to amplifiers.

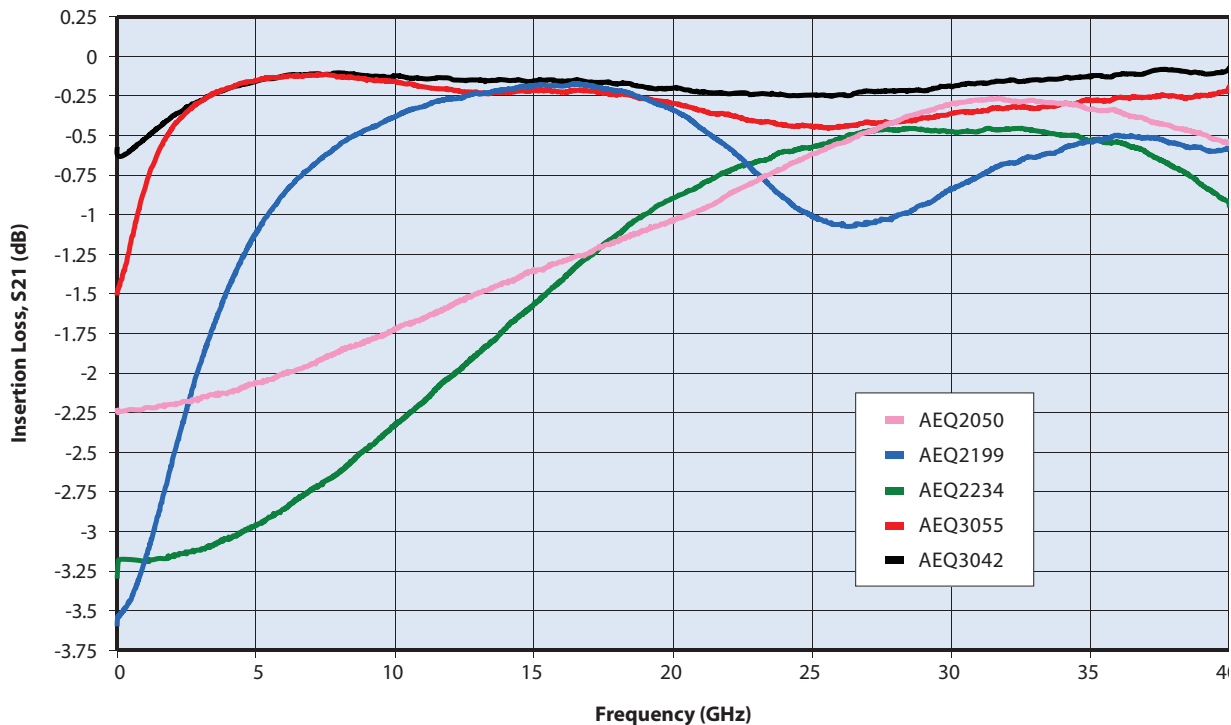
### Benefits:

- Superior microwave performance
- Excellent repeatability
- Ease of assembly
- Custom designs possible

### Equivalent Schematic Representation

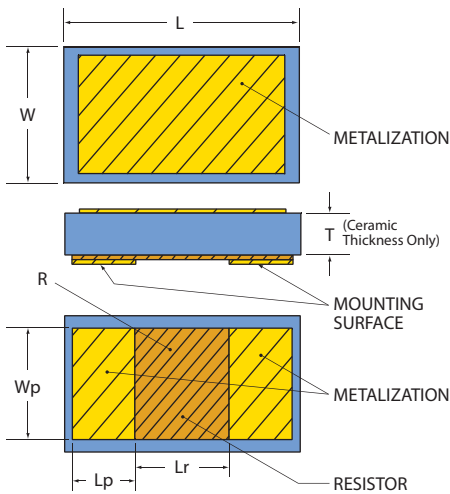


Equalizer Typical Performance



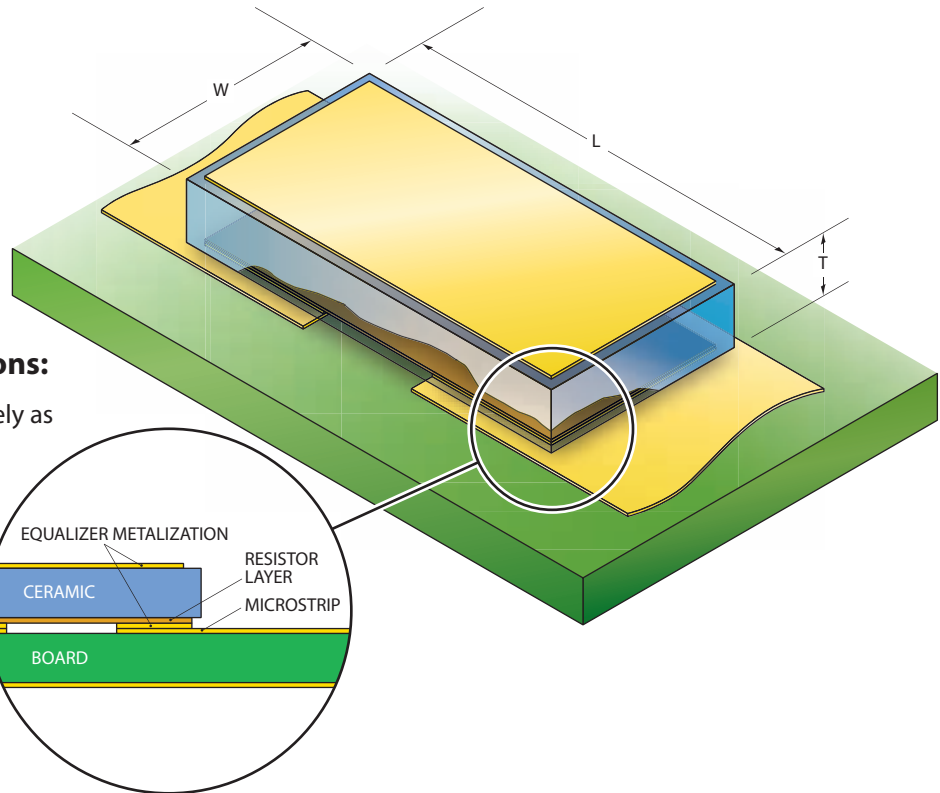
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## Physical Characteristics



| Part Number | L      | W      | T     | Lp       | Wp      | Lr      | Attachment Material |
|-------------|--------|--------|-------|----------|---------|---------|---------------------|
| AEQ2050     | 30 ± 2 | 18 ± 2 | 5 ± 1 | 9 ± 1    | 14 ± 1  | 8 ± 1   | Epoxy               |
| AEQ2199     | 28 ± 2 | 16 ± 2 | 7 ± 1 | 7 ± 1    | 14 ± 1  | 12 ± 1  | Epoxy               |
| AEQ2234     | 32 ± 2 | 16 ± 2 | 5 ± 1 | 8 ± 1    | 12 ± 1  | 12 ± 1  | Epoxy               |
| AEQ3042     | 40 ± 2 | 20 ± 2 | 6 ± 1 | 17.5 ± 1 | 18 ± 1  | 3 ± 1   | Solder              |
| AEQ3055     | 40 ± 2 | 20 ± 2 | 6 ± 1 | 15.4 ± 1 | 184 ± 1 | 7.2 ± 1 | Solder              |

Dimensions in mils



## Die Attachment Recommendations:

- 1) Equalizer width should be approximately as wide as 50 ohm line trace on PCB.
- 2) The gap in the microstrip line should be nominally equal to dimension Lr.
- 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.

Mechanical outline drawings for equalizers listed above are available. Please contact DLI Applications Engineering for details.



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