

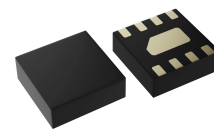
MG-EQY-6-63

3dB 50Ω Equalizer DC to 6GHz

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Applications

- 1, Cellular
- 2, PCS
- 3, Communications
- 4, Radar
- 5, Defense



Features

- 1, Negative insertion loss slope vs frequency
- 2, Wideband operation, DC to 6 GHz
- 3, Excellent Power Handling Capability 32 dBm
- 4, Small Size and simple to use (2 mm x 2 mm)

Description

The MG-EQY-6-63 is an absorptive Gain Equalizer fabricated , capacitors and inductors having negative insertion loss slope. MG-EQY-6-63 has a nominal attenuation slope of 6.5 dB and is packaged in tiny 2 x 2 mm, 8-Lead MCLP™ package.

Characteristics

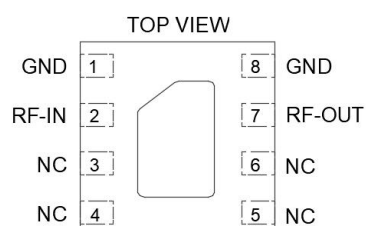
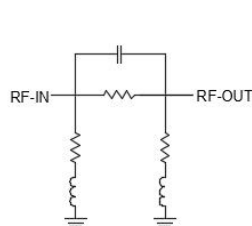
Table 1. MG-EQY-6-63 Characteristics

Item	Min.	Type	Max.	Unit
Frequency Range	DC		6000	MHz
Insertion Loss	0.51		7.43	dB
Return Loss	18	20		dB
Operating Case Temperature	-40		+85	°C
Operating Temp.	-65		+150	°C
Power			+32	dBm

All the above data are based on specified demo board and tested in 25° environment.

Port configurations & simplified schematic

Figure 1. MG-EQY-6-63 (Top View)



Pin #	Connection
1,8	Ground
2	RF-Input
7	RF-Output
3,4,5,6	No connection

All Use For RF & Microwave

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Typical Performance (25°C, DC-6000 MHz)

Figure 2. MG-EQY-6-63 Insertion Loss



Figure 3. MG-EQY-6-63 Return Loss

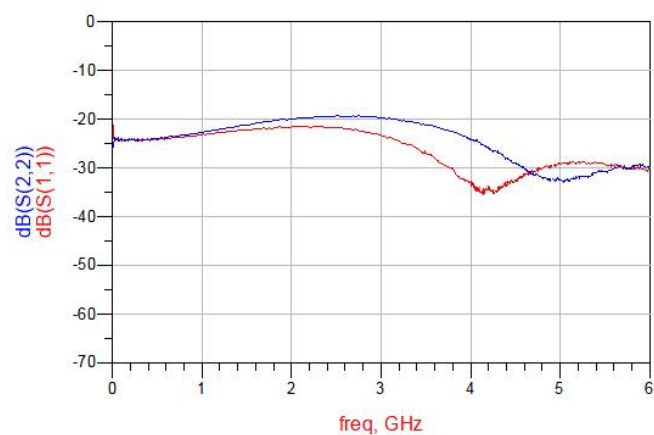


Table 2. MG-EQY-6-63 Insertion Loss

Frequency (MHz)	Insertion Loss (dB)	Return Loss (S11)	Return Loss (S22)
10	7.43	21.19	24.98
50	7.16	24.06	24.08
100	7.17	24.03	24.23
500	7.01	23.99	23.96
1000	6.49	23.10	22.59
1200	6.21	22.65	21.99
1700	5.42	21.80	20.49
2200	4.54	21.57	19.67
2700	3.65	22.07	19.32
3000	3.13	23.32	19.60
3200	2.80	24.44	20.14
4000	1.63	32.87	24.21
4500	1.07	32.72	29.02
5000	0.71	28.98	32.40
5500	0.54	29.00	30.70
6000	0.51	30.09	29.77

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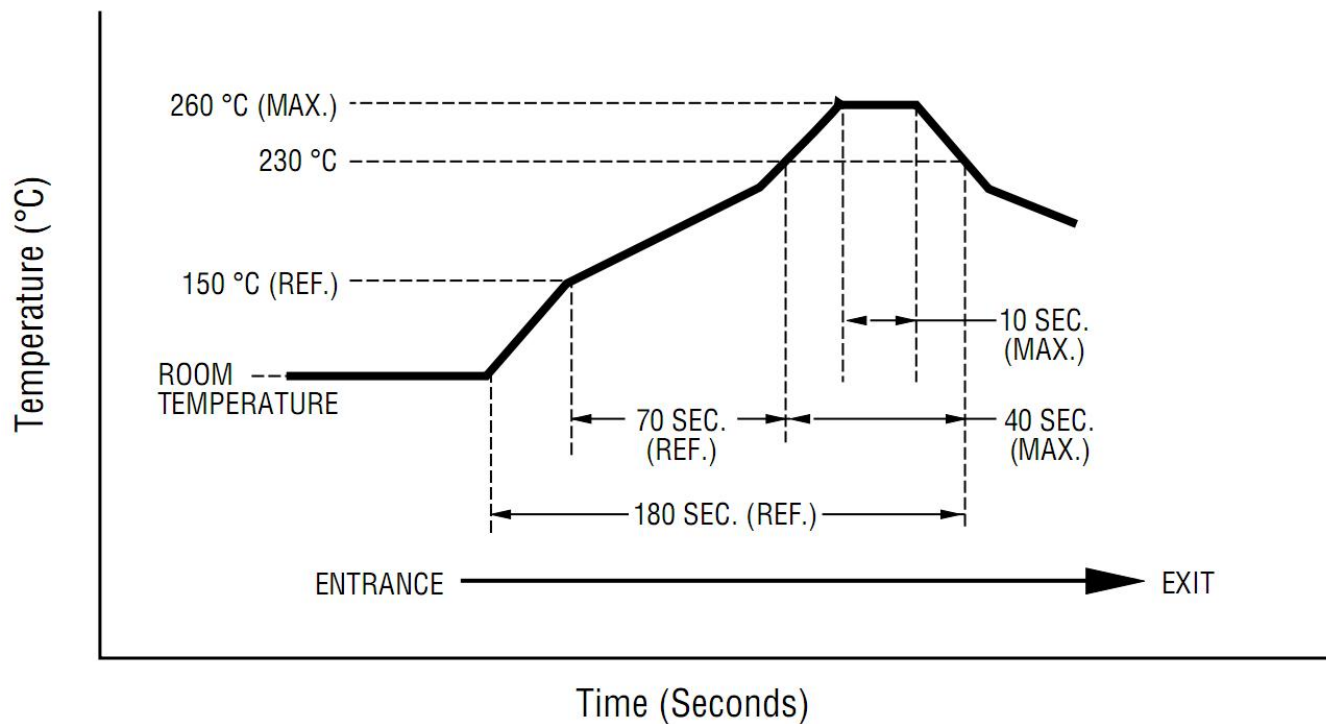
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Reflow Profile

Figure 12. MG-EQY-6-63 Thermal Reflow Profile



Packaging and Ordering Information

Table 4. MG-EQY-6-63 Ordering Information

Device	Package	Reel	Shipping
MG-EQY-6-63	2*2mm	7"	4000 Reel

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Revision	Description	Date
Rev0	Preliminary	2025/11/17

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