

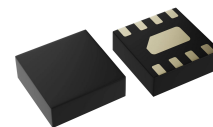
MG-EQY-3-63

3dB 50Ω Equalizer DC to 6GHz

MECSINE 兆讯

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 31 dBm
- 4, Small Size and simple to use (2 mm x 2 mm)

Description

The MG-EQY-3-63 is an absorptive Gain Equalizer fabricated , capacitors and inductors having negative insertion loss slope. MG-EQY-3-63 has a nominal attenuation slope of 3.2 dB and is packaged in tiny 2 x 2 mm, 8-Lead MCLP™ package.

Characteristics

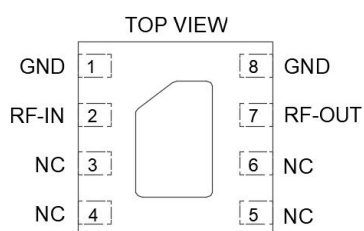
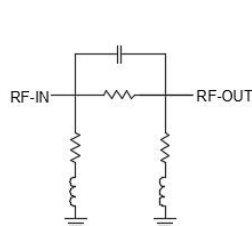
Table 1. MG-EQY-3-63 Characteristics

Item	Min.	Type	Max.	Unit
Frequency Range	DC		6000	MHz
Insertion Loss	0.52		4.18	dB
Return Loss	18	20		dB
Operating Case Temperature	-40		+85	°C
Operating Temp.	-65		+150	°C
Power			+31	dBm

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

Port configurations & simplified schematic

Figure 1. MG-EQY-3-63 (Top View)



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

All Use For RF & Microwave

MG-EQY-3-63

3dB 50Ω Equalizer DC to 6GHz

MECSINE 兆讯

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

Figure 2. MG-EQY-3-63 Insertion Loss

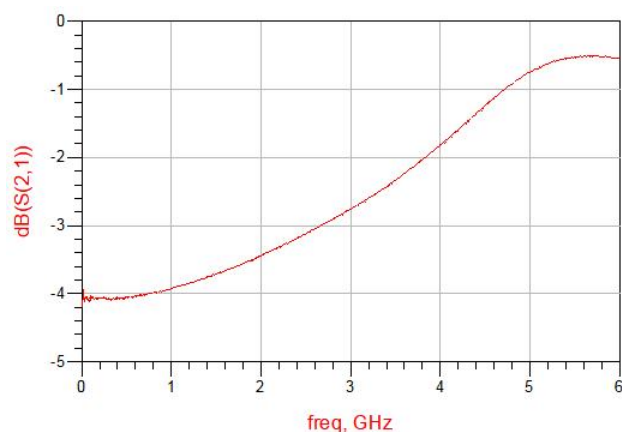


Figure 3. MG-EQY-3-63 Return Loss

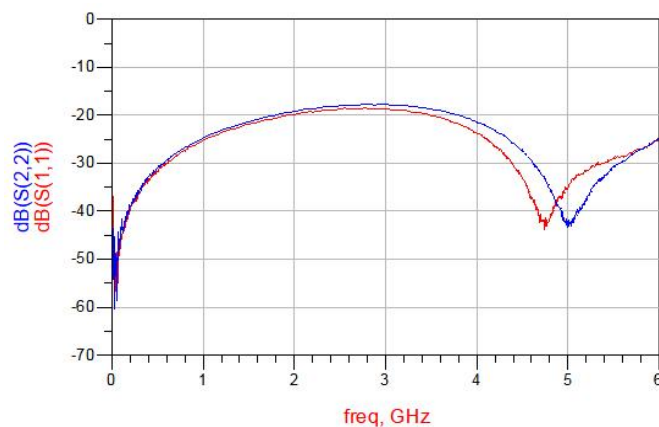


Table 2. MG-EQY-3-63 Insertion Loss

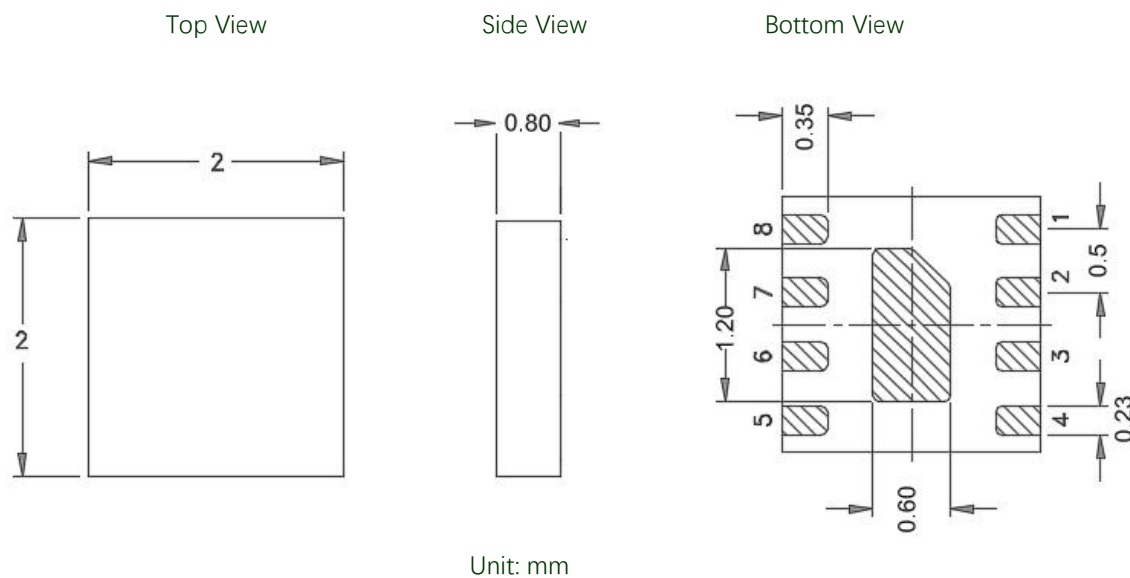
Frequency (MHz)	Insertion Loss (dB)	Return Loss (S11)	Return Loss (S22)
10	4.18	35.45	45.47
50	4.04	48.63	51.51
100	4.06	46.16	45.05
500	4.04	31.65	30.98
1000	3.91	25.19	24.62
1200	3.84	23.60	23.09
1700	3.61	20.81	20.26
2200	3.31	19.31	18.69
2700	2.97	18.53	17.87
3000	2.75	18.56	17.71
3200	2.59	18.96	18.00
4000	1.82	23.75	21.43
4500	1.23	32.97	27.38
5000	0.74	35.00	42.30
5500	0.52	29.00	30.65
6000	0.54	25.00	24.82

All Use For RF & Microwave

3dB 50Ω Equalizer DC to 6GHz

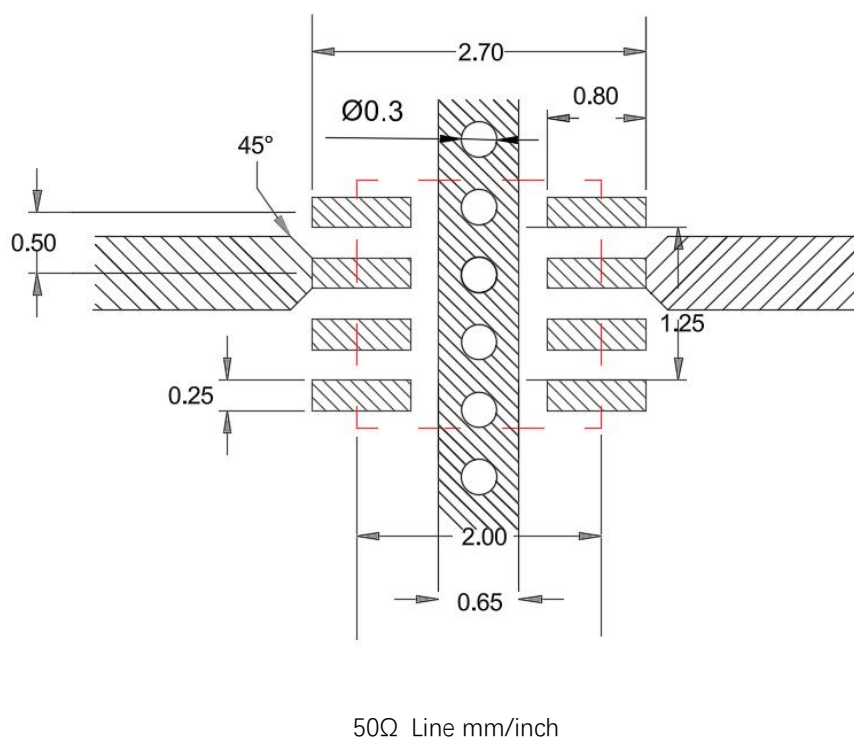
Outline Drawing

Figure 4.MG-EQY-3-63 Outline Drawing



Recommended PCB Layout

Figure 5. Recommended PCB Layout



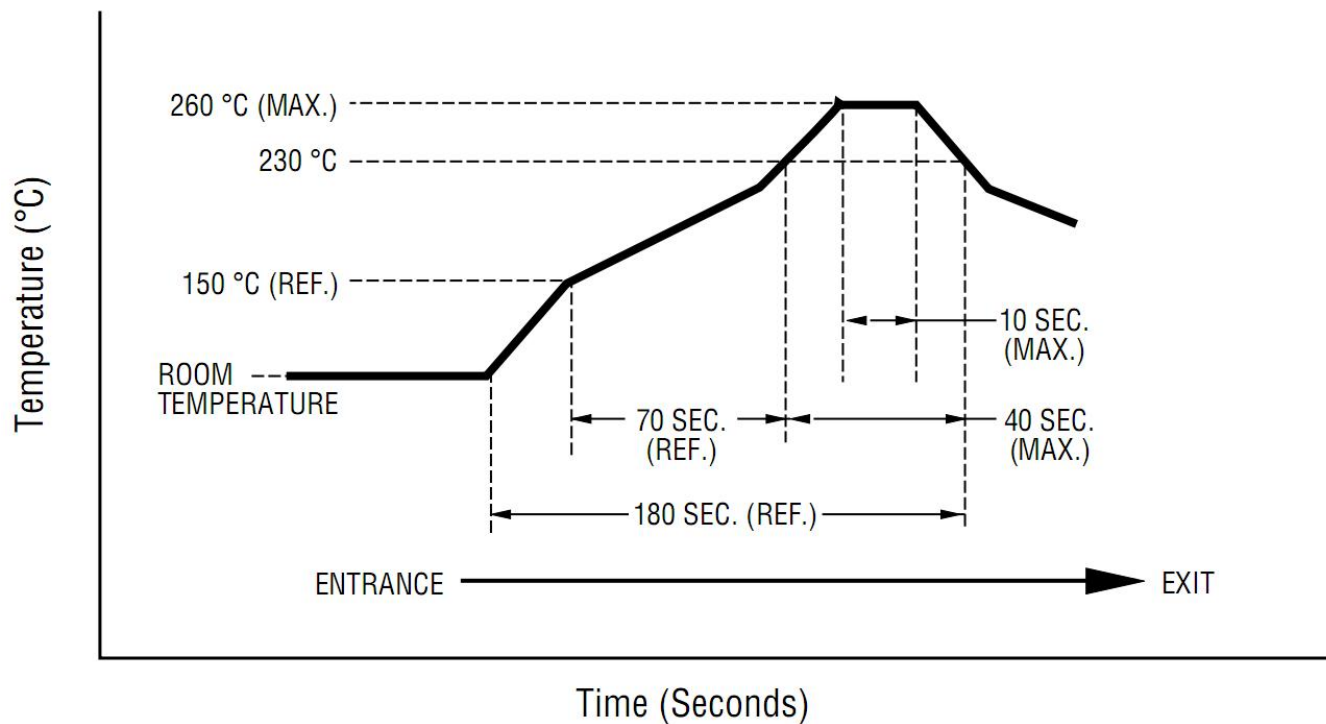
MG-EQY-3-63

3dB 50Ω Equalizer DC to 6GHz

MECSINE 兆赫讯

Reflow Profile

Figure 12. MG-EQY-3-63 Thermal Reflow Profile



Packaging and Ordering Information

Table 4. MG-EQY-3-63 Ordering Information

Device	Package	Reel	Shipping
MG-EQY-3-63	2*2mm	7"	4000 Reel

All Use For RF & Microwave

MG-EQY-3-63

3dB 50Ω Equalizer DC to 6GHz



Revision	Description	Date
Rev0	Preliminary	2025/11/17

All Use For RF & Microwave