

Feature

- Precision MEMS process
- High performance, shielded, Micro-cavity structure
- Silicon substrate, 50Ω CPW output
- Au wire bonding, for MCM applications

Environmental Specifications

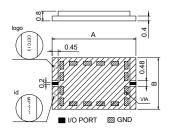
Operating Temperature	-55℃~+85℃	
Storage Temperature	-55℃~+125℃	
Max. Input Power	35dBm	

Electrical Specifications(T_A=+25°C)

Parameter	Min.	Тур.	Max.	Unit
Center Freq. (f₀)	-	4.5	-	GHz
Pass Band	4.0	-	5.0	GHz
Ripple in Pass band	-	-	1	dB
Insertion Loss @ f ₀	-	ı	2.5	dB
Return Loss	13	-	-	dB
	≥30@3.5GHz&5.5GHz			
Out of band	≥40@3.3GHz&5.6GHz			
Attenuation	≥60@DC~3GHz			
	≥60@6~10GHz			

S2P file name: SiMF4R5_1-7D3.s2p

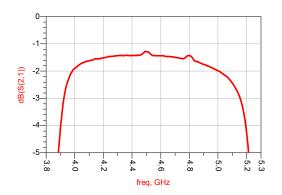
Outline Drawing



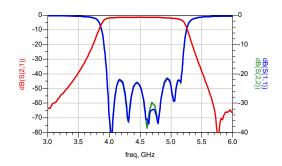
Symbol	Value (mm)		
	Min.	Nominal	Max.
А	6.9	-	7.0
В	6.2	=	6.3

Typical Test Curves

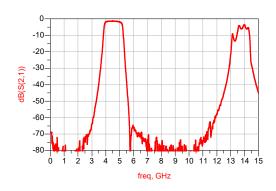
Insertion Loss VS Frequency (T_A=25°C)



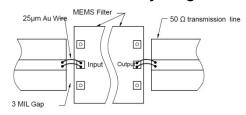
Insertion Loss & Return Loss VS Frequency (T_A=25°C)



Broadband Insertion Loss VS Frequency (T_A=25°C)

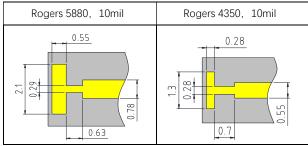


Recommended Assembly Diagrams



Application Notes:

- 1. The chip is back-metalized and can be die mounted with AuSn eutectic performs or with electrically conductive epoxy (for example ME8456).
- 2. The die should be assembled on carriers like Kovar or Mu-Cu which have same Coefficient of thermal expansion. (2.9ppm/°C) with Silicon, thickness 0.2mm max.
- 3. Handle the chips in a clean environment. DO NOT attempt to clean the chip using liquid cleaning systems.
- 4. Handle the chip along the edges with a vacuum collet or with a sharp pair of bent tweezers.
- 5. Recommended to use T structure as below for bonding.



6. If you have any questions, please contact us.