

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCG-490+

Features

- Low insertion loss.
- Good rejection.
- LTCC Construction.
- temperature stable.
- Small size.

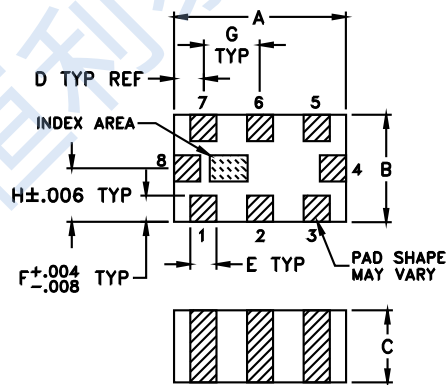
Applications

- Test and measurement
- Telecommunications & broadband wireless applications
- Harmonic Rejection
- VHF/UHF transmitters / receivers

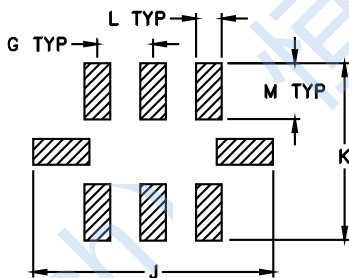
Pad Connections

RF IN	8
RF OUT	4
GROUND	1,2,3,5,6,7

Outline Drawing



PCB Land Pattern

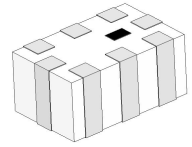
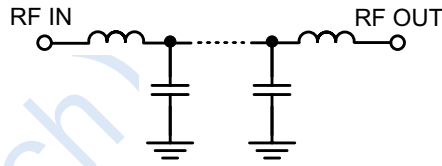


Suggested Layout,
Tolerance to be within .002

Outline Dimensions : inch mm

A	B	C	D	E	F	G
.079	.049	.037	.014	.012	.012	.026
2.01	1.24	0.94	0.36	0.30	0.30	0.66
H	J	K	L	M	wt	
.025	.134	.104	.014	.039	grams	
0.64	3.40	2.64	0.36	0.99	.008	

Functional Schematic



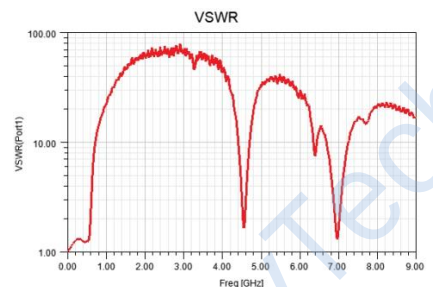
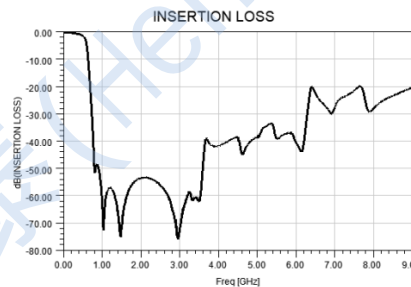
50 Ω
DC to 490MHz

Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-490	—	1.5	2.0	dB
	Freq. Cut-Off	570	—	3.0	—	dB
	Return Loss	DC-490	—	14	—	dB
Stop Band	Rejection Loss	800-960	20	50	—	dB
		960-1500	40	48	—	dB
		1500-3000	35	45	—	dB
		3000-8500	—	15	—	dB

1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

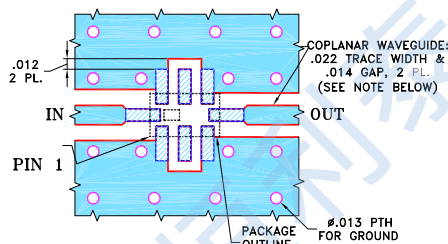
Typical Performance Data at 25°C



Notes

- The specifications are tested at 25°C±5°C, relative humidity 55~75%.
- Other quality and characteristic not specify in this datasheet.

Suggested PCB Layout



NOTES:

1. COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

■ DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).

■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

Maximum Ratings

Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
RF Power Input*	3.5W at 25°C

*Permanent damage may occur if any of these limits are exceeded.