

**Features**

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

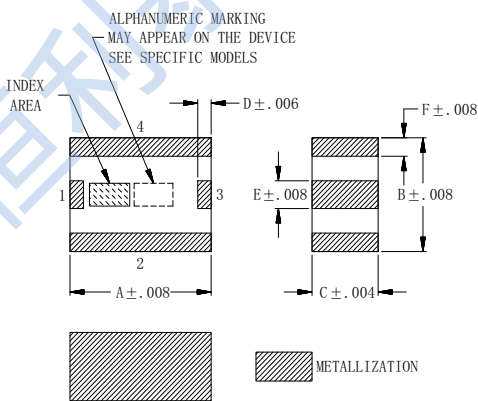
**Applications**

- Harmonic rejection.
- Lab use.

**Pad Connections**

RF IN	1
RF OUT	3
GROUND	2,4

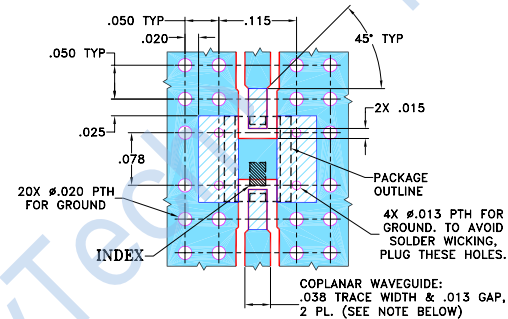
**Outline Drawing**



OUTLINE DIMENSIONS (inches / mm)

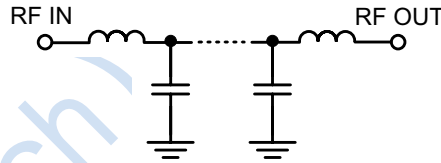
A	B	C	D	E	F	Wt.
.126	.098	.059	.012	.024	.016	grams
3.2	2.5	1.5	.3	.6	.4	.03

**Suggested PCB Layout**



- NOTES:**
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". 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

**Functional Schematic**



50 Ω  
DC to 45MHz

**Electrical Specifications(1) at 25°C**

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Passband	Insertion Loss	DC - 45	—	0.9	1.3	dB
	Freq. Cut-Off	85	—	3	—	dB
	Return Loss	DC - 45	—	23	—	dB
Stopband	Rejection	120	20	25	—	dB
		150 - 910	—	40	—	dB
		1000	—	14	—	dB

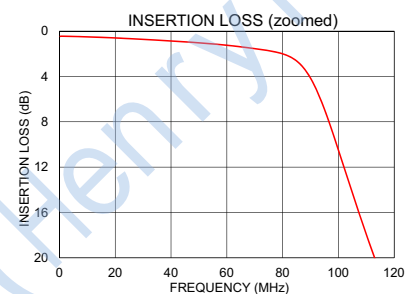
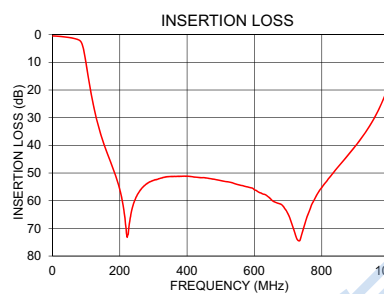
1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

**Typical Performance Data at 25°C**

FREQUENCY (MHz)	INSERTION LOSS (dB)	VSWR (:1)
10	0.51	26.19
20	0.61	25.84
40	0.87	28.36
45	0.95	28.80
85	2.63	13.92
88	3.40	9.61
113	20.00	1.38
120	24.47	1.22
130	29.97	1.09
150	38.50	0.94
180	48.37	0.78
300	52.65	0.41
600	56.06	0.16
910	38.66	0.17
800	55.24	0.13
1000	17.95	1.25

**Notes:**

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



**Maximum Ratings**

Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
RF Power Input*	7W at 25°C

\* Passband rating, derate linearly to 0.9W at 125°C ambient. Permanent damage may occur if any of these limits are exceeded.

