

Metal Shield Bandpass Filter

ECO RBP-280+

50 Ω 260 to 310 MHz

Features

- linear phase, up to $\pm 6^\circ$ typ. @ $F_c \pm 30\text{MHz}$
- good VSWR, 1.6:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- military radio

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

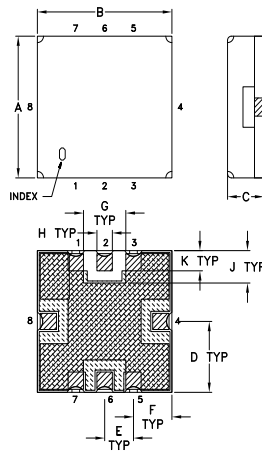
RF Power Input 0.5W at 25°C

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

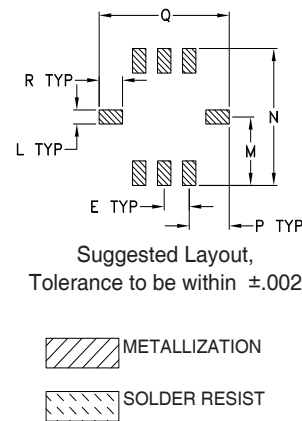
Pin Connections

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

Outline Drawing



PCB Land Pattern



Bandpass Filter Electrical Specifications ($T_{AMB} = 25^\circ\text{C}$)

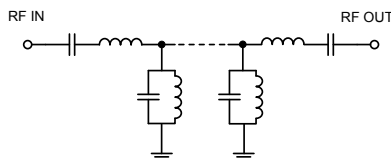
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4.5dB)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
		Loss > 20dB		Loss > 35dB			Passband		Stopband
		F3	F4	F5	F6		Typ.	Max.	Typ.
Fc	F1 - F2					Fc ± 30MHz			
280	260 - 310	205	375	185	420 - 2000	±12	1.6	2.4	30

Outline Dimensions (inch/mm)

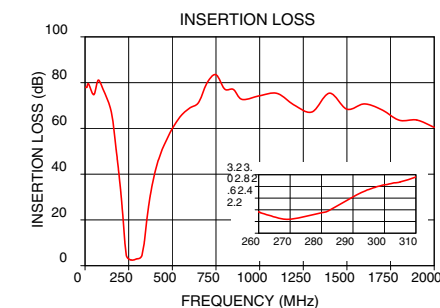
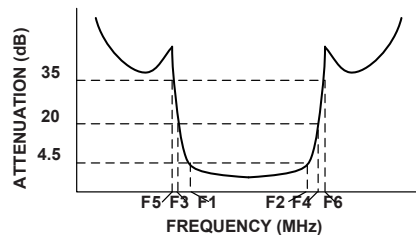
A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
89	8.89	2.54	4.45	1.91	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt	
.050	.040	.195	.390	.120	.390	.070	1.	grams
27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

Note: Please refer to case style drawing for details

Functional Schematic



Typical Frequency Response



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg.)
0.5	77.	4076.40	250.0	5.97
185.	9846.	93.42	254.0	2.66
0205.	3031.	39.49	258.0	0.33
0217.	8921.	17.82	262.0	-1.03-1
0228.	4010.	4.89	266.0	.67-1.
0236.	22	1.55	270.0	92-1.
0260.	4.64	1.03	274.0	80-1.
0280.	2.56	1.41	278.0	69-1.
0295.	2.55	1.78	282.0	37-0.
0300.	2.95	1.71	286.0	94-0.
0310.	3.03	1.42	290.0	25
0326.	3.16	1.98	294.0	0.59
0339.	4.48	5.53	298.0	1.20
0355.	10.	15.92	300.0	1.43
0375.0	0520.	29.96	302.0	1.51
420.0	467231.	59.81	306.0	1.22
1000.0	74.2630	99.25	308.0	0.77
2000.0	60.49	65.03	310.0	0.04

