

# Surface Mount Band Stop Filter

## BSP-255310+

50Ω 255 to 310 MHz

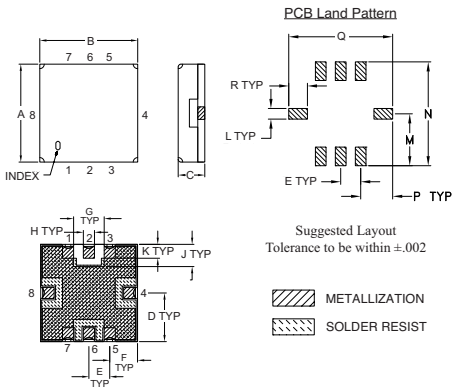
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

### Pin Connections

INPUT	2
OUTPUT	6
GROUND	1, 3, 4, 5, 7, 8

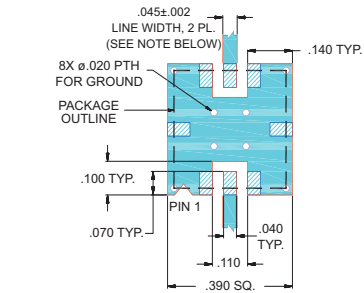
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.93	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt.	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

### Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



NOTES:  
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE.  
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

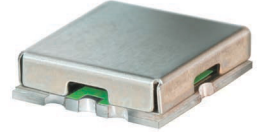
■ DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Features

- High Rejection
- Small Size (0.35" x 0.35")
- Shielded case
- Aqueous washable

### Applications

- Military communications
- Receivers / Transmitters
- Harmonic rejection



CASE STYLE: GP731  
PRICE: \$41.95 QTY (1-9)

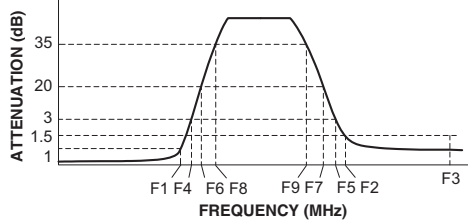
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

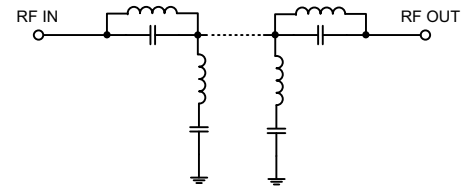
### Band Stop Filter Electrical Specifications

STOPBANDS (MHz)		Loss 3dB	PASSBANDS (MHz)		VSWR (:1)	
(Loss > 20dB)	(Loss > 35dB)	Typ.	Loss < 1dB	Loss < 1.5dB	Stopband Typ.	Passband Typ.
F6 - F7	F8 - F9	F4, F5	F1	F2 - F3		
255 - 310	262 - 295	230 & 345	180	400 - 1000	12	1.6

### Typical Frequency Response

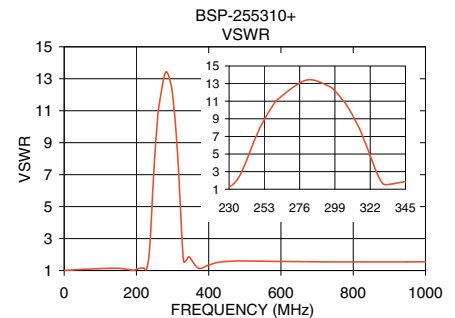
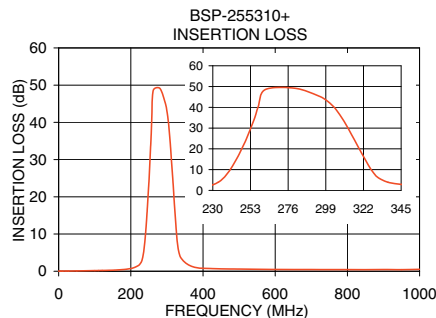


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.1	0.03	1.01
180.0	0.46	1.06
210.0	1.01	1.15
230.0	2.72	1.24
234.0	4.24	1.79
240.0	9.26	3.65
245.0	15.83	5.91
255.0	33.69	9.53
262.0	48.54	11.24
295.0	45.34	12.71
310.0	33.43	9.58
317.0	23.58	7.05
325.0	12.12	3.42
331.0	6.09	1.55
345.0	2.87	1.86
360.0	1.68	1.41
400.0	0.80	1.34
800.0	0.45	1.54
1000.0	0.51	1.55



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