

Surface Mount Low Pass Filter

SALF-265+ SALF-265

50Ω DC to 265 MHz

Maximum Ratings

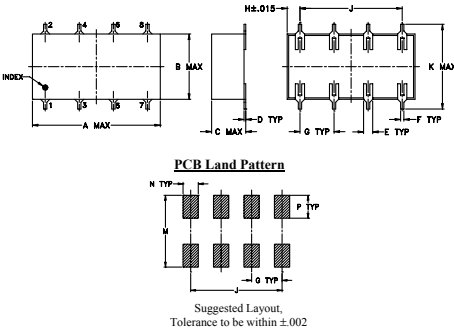
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

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

Pin Connections

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

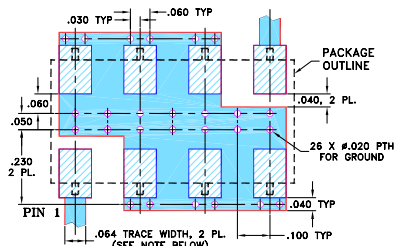
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.75	.38	.20	.010	.050	.020	.200
19.05	9.65	5.08	0.25	1.27	0.51	5.08
H	J	K	M	N	P	wt
.075	.600	.450	.470	.100	.150	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.6

Demo Board MCL P/N: TB-187+ Suggested PCB Layout (PL-049)



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
-

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- 7-section elliptic function
- excellent rejection

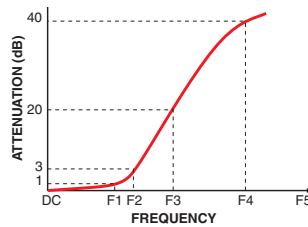
Applications

- defense communications
- receivers/transmitters
- harmonic rejection of VCOs

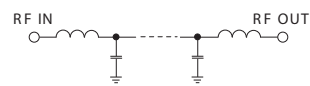
Electrical Specifications

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-265	—	—	1.0	dB
	Freq. Cut-Off	F2	308	—	3.0	—	dB
	VSWR	DC-F1	DC-265	—	1.2	—	:1
Stop Band	Rejection Loss	F3-F4	390-470	40	—	—	dB
		F4-F5	470-1100	20	—	—	dB
	VSWR	F3-F5	390-1100	—	18	—	:1

Typical Frequency Response

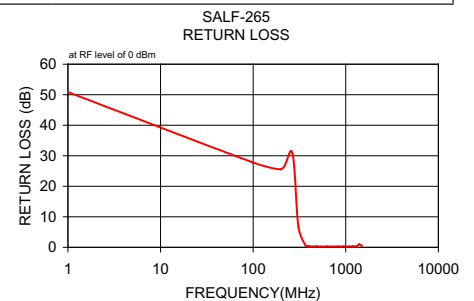
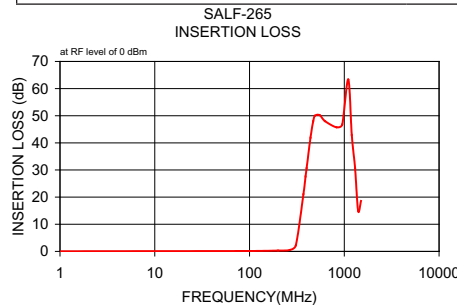


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	\bar{x}	σ	
1.00	0.02	0.00	50.86
100.00	0.16	0.00	27.79
200.00	0.32	0.00	25.62
265.00	0.51	0.01	30.86
308.00	2.28	0.25	6.85
370.00	21.06	0.66	0.46
390.00	27.62	0.68	0.37
400.00	30.69	0.70	0.34
440.00	41.90	0.75	0.25
470.00	47.98	0.73	0.28
490.00	50.01	0.65	0.26
550.00	50.21	0.51	0.25
625.00	48.01	0.44	0.26
825.00	45.76	0.49	0.27
950.00	46.72	0.66	0.29
1100.00	63.32	4.06	0.26
1200.00	42.86	0.87	0.31
1300.00	30.69	0.64	0.32
1400.00	14.94	1.46	0.93
1500.00	18.59	0.66	0.46



Generic photo used for illustration purposes only

CASE STYLE: YY101

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications