

Ceramic

Low Pass Filter

New!
LPCH-500

DC to 500 MHz

Features

- excellent rejection, 40 dB at 1.35 f_3 dB
- excellent power handling, 10W
- low height
- 9 sections

Applications

- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use



BLUE CELL™

CASE STYLE: BJ850
PRICE: \$5.95 ea. QTY.: (10-49)
(Patent pending)

Electrical Specifications ($T_{AMB} = -55^{\circ}\text{C}$ to 100°C)

MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Min.	f_{co} , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz)		VSWR (:1)	
			(loss > 20 dB) Min.	(loss > 35 dB) Min.	Passband Typ.	Stopband Typ.
LPCH-500	DC-500	700	825-950	950-1450	1.2	20

Pin Connections

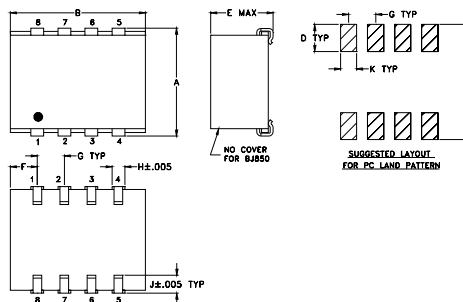
IN	1
OUT	5
GROUND	2,3,4,6,7,8
DEMO BOARD	TB-189

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	10W* max. at 25°C

*derate linearly to 3W at 100°C

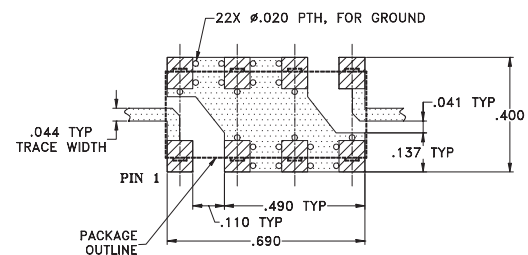
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	wt.
.320	.700	—	.110	.070	.050	.200	.047	.065	.090	.400	grams
8.13	17.87	—	2.79	1.78	1.27	5.08	1.19	1.65	2.29	10.16	1.0

Suggested PCB Layout (PL-047)



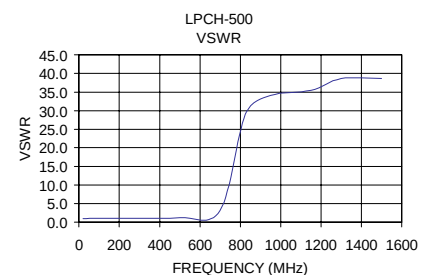
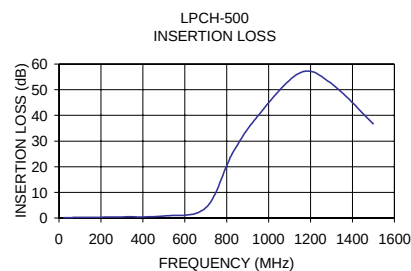
NOTES:

1. TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS $0.020" \pm 0.0015"$, COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. IF YOUR PCB DESIGN RULES ALLOW, GROUND VIAS SHOULD BE PLACED UNDER THE LAND PATTERN FOR BETTER RF PERFORMANCE. OTHERWISE GROUND VIAS SHOULD BE PLACED AS CLOSE TO LAND PATTERN AS POSSIBLE.

- DENOTES LAND PATTERN
- DENOTES PCB LAYOUT

Typical Performance Data at 25°C

Freq. (MHz)	Ins. Loss (dB)	VSWR (:1)
20.00	0.12	1.03
100.00	0.22	1.07
300.00	0.42	1.11
500.00	0.81	1.31
700.00	3.95	3.19
825.00	24.81	28.96
950.00	39.93	34.07
1150.00	56.63	35.46
1300.00	52.33	38.61
1500.00	36.61	38.61



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