

### Features

- Flat group delay over passband
- High rejection (55 dB typical)
- Shielded case
- Aqueous washable

### Applications

- Test equipments
- Transmitters / Receivers
- Harmonic rejection
- Radio-SMR and police band
- Military



50Ω 148 to 175 MHz

### Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	161.5	—	MHz
	Insertion Loss	F1-F2	148-175	—	2.6	3.5 dB
	VSWR	F1-F2	148-175	—	1.4	1.8
Stop Band, Lower	Insertion Loss	DC-F3	DC-130	20	29	dB
	VSWR	DC-F3	DC-130	—	35	—
Stop Band, Upper	Insertion Loss	F4-F5	200-2300	20	27	dB
	VSWR	F4-F5	200-2300	—	26	—

### Maximum Ratings

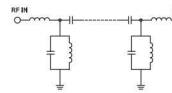
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

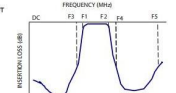
RF Power Input\* 0.4W max.

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

### Functional Schematic



### Typical Frequency Response



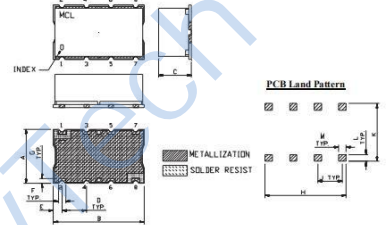
### Typical Performance Data at 25°C

FREQUENCY (GHz)	INSERTION LOSS (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	79.11	45.72	148.0	40.77
100.0	64.25	115.81	150.0	37.24
115.0	48.39	108.58	152.0	33.45
130.0	29.78	49.64	154.0	30.71
139.0	14.67	13.92	156.0	28.97
143.0	7.07	4.50	158.0	27.83
146.0	3.35	1.72	159.0	27.41
148.0	2.44	1.19	160.0	27.07
161.5	1.73	1.06	161.0	26.78
175.0	2.29	1.03	161.0	26.71
178.0	3.48	1.79	162.0	26.59
180.0	5.28	2.96	163.0	26.45
185.0	11.82	8.39	164.0	26.35
190.0	18.09	15.13	165.0	26.31
200.0	27.76	28.03	166.0	26.33
235.0	47.08	69.49	168.0	26.60
500.0	79.92	248.17	170.0	27.47
1000.0	83.01	144.77	172.0	29.19
1500.0	75.30	102.19	174.0	31.52
2300.0	53.86	75.53	175.0	32.61

### Pad Connections

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

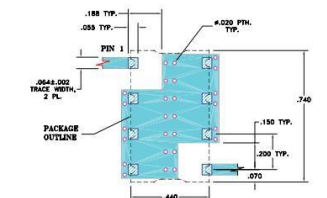
### Outline Drawing



### Outline Dimensions: Unit (mm)

A	11.18	D	5.08	G	1.02
B	18.80	E	1.78	H	16.76
C	6.86	F	1.52	J	5.08
L	1.40	M	1.52	K	11.94
wt					3.0

Demo Board MCL P/N: TB-368  
Suggested PCB Layout (PL-230)



NOTE:  
1. TRACE WIDTH IS SHOWN FOR PBA WITH DIELECTRIC THICKNESS: .007" (0.007" COOPER, 1/2 OZ. BASE COOPER). 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 BASE COOPER)  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

