

Bandpass Filter

BPF-A332+

50Ω 329 to 335 MHz

Maximum Ratings

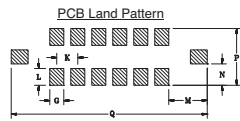
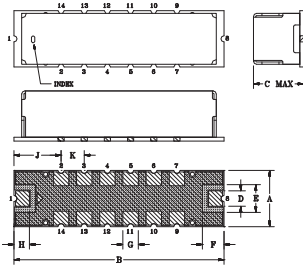
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5W at 25°C |

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

Pin Connections

| | |
|--------|------------------------------|
| RF IN | 1 |
| RF OUT | 8 |
| GROUND | 2,3,4,5,6,7,9,10,11,12,13,14 |

Outline Drawing



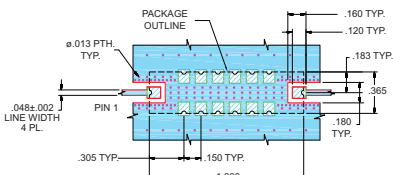
Suggested Layout
Tolerance to be within ±.002

METALLIZATION SOLDER RESIST

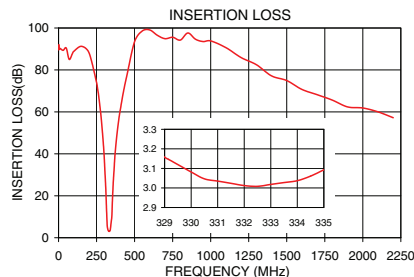
Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H |
|------|-------|------|------|------|-------|-------|-------|
| .365 | 1.360 | .35 | .100 | .180 | .140 | .100 | .100 |
| 9.27 | 34.54 | 8.89 | 2.54 | 4.57 | 3.58 | 2.54 | 2.54 |
| J | K | L | M | N | P | Q | wt. |
| .305 | .150 | .120 | .275 | .152 | .405 | 1.400 | grams |
| 7.75 | 3.81 | 3.05 | 6.99 | 3.87 | 10.29 | 35.65 | 4.0 |

Demo Board MCL P/N: TB-363+ Suggested PCB Layout (PL-227)



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

- Linear phase, up to ±5 deg typ @ Fc ± 7.5 MHz
- High rejection
- Shielded case
- Aqueous washable

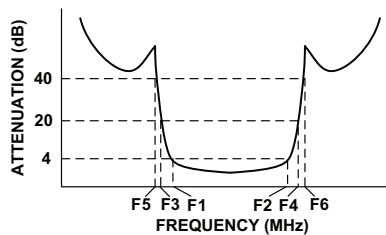
Applications

- Radio communications
- Harmonic rejection
- Transmitters/receivers

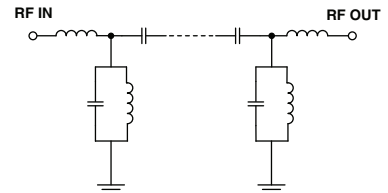
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

| CENTER FREQ. (MHz) | PASSBAND (MHz) (Loss < 4dB) | STOPBANDS (MHz) | | | | MAXIMUM DEVIATION FROM LINEAR PHASE (deg.) | VSWR (:1) | | |
|--------------------|-----------------------------|-----------------|-----|-------------|------------|--|-----------|------|----------|
| | | Loss > 20dB | | Loss > 40dB | | | Passband | | Stopband |
| Fc | F1 - F2 | F3 | F4 | F5 | F6 | Fc ± 7.5MHz | Typ. | Max. | Typ. |
| 332 | 329 - 335 | 305 | 365 | 290 | 385 - 2200 | ±10 | 1.4 | 1.8 | 20 |

Typical Frequency Response

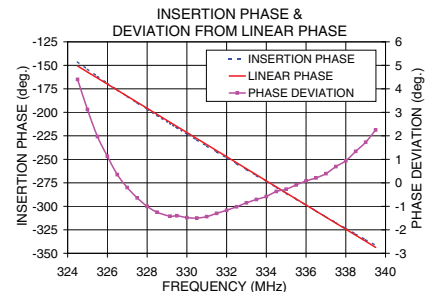
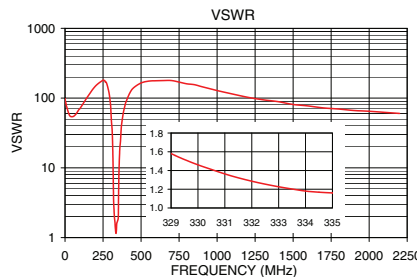


Functional Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) | Frequency (MHz) | Deviation from Linear Phase (deg.) |
|-----------------|---------------------|-----------|-----------------|------------------------------------|
| 0.5 | 89.57 | 98.58 | 324.5 | 4.40 |
| 250 | 74.03 | 180.61 | 325.5 | 1.97 |
| 290 | 49.02 | 116.69 | 326.5 | 0.35 |
| 305 | 31.30 | 46.61 | 327.5 | -0.64 |
| 310 | 24.00 | 33.56 | 328.5 | -1.25 |
| 315 | 13.85 | 14.80 | 329.0 | -1.42 |
| 319 | 7.12 | 3.76 | 329.5 | -1.40 |
| 329 | 3.16 | 1.58 | 330.5 | -1.50 |
| 332 | 3.01 | 1.29 | 331.5 | -1.30 |
| 335 | 3.09 | 1.16 | 332.0 | -1.17 |
| 345 | 6.86 | 1.73 | 332.5 | -1.02 |
| 352 | 13.84 | 3.88 | 333.5 | -0.71 |
| 355 | 19.43 | 8.82 | 334.5 | -0.37 |
| 365 | 32.76 | 24.52 | 335.0 | -0.27 |
| 385 | 49.98 | 64.49 | 335.5 | -0.09 |
| 500 | 93.50 | 164.78 | 336.5 | 0.21 |
| 2000 | 61.85 | 64.67 | 338.5 | 1.34 |
| 2200 | 57.21 | 60.17 | 339.5 | 2.25 |



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