

SPECIFICATION

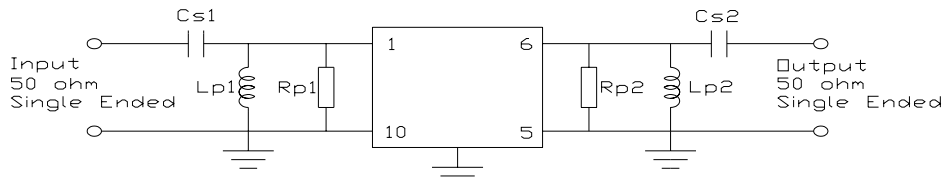
| Parameter | Min | Typ | Max | Units |
|--|------|-------|-----|---------|
| Center Frequency (Fc, 10 dB bandwidth) | - | 88.50 | - | MHz |
| Insertion Loss at Fc | - | 19.5 | 22 | dB |
| Passband Width at -1 dB ¹ | 1.25 | 1.33 | - | MHz |
| Rejection at Fc +/- 0.625 MHz ¹ | - | 0.7 | 1 | dB |
| Rejection at Fc +/- 0.89 MHz ¹ | 16 | 19 | - | dB |
| Rejection at Fc +/- 1.24 MHz ¹ | 20 | 33 | - | dB |
| Rejection at Fc +/- 1.69 MHz ¹ | 22 | 38 | - | dB |
| Rejection at Fc +/- 2.04 MHz ¹ | 28 | 40 | - | dB |
| Rejection at Fc - 15.5 MHz ¹ | 50 | 63 | - | dB |
| Rejection at Fc + 15.5 MHz ¹ | 45 | 51 | - | dB |
| Ultimate Rejection (Fc-30 to Fc-16 MHz) ¹ | 50 | 60 | - | dB |
| Ultimate Rejection (Fc+16 to Fc+30 MHz) ¹ | 45 | 46 | - | dB |
| Amplitude Ripple (Fc +/- 0.5 MHz) | - | 0.5 | 1 | dB p-p |
| Phase Linearity (Fc +/- 0.625 MHz) | - | 6 | 10 | deg p-p |
| Input Return Loss at Fc | 10 | 20 | - | dB |
| Output Return Loss at Fc | 10 | 20 | - | dB |
| System Source and Load Impedance | - | 50 | - | Ohm |

Notes: 1. Stated dB level is relative to the insertion loss at Fc.

MAXIMUM RATINGS

| Parameter | Min | Max | Units |
|----------------------------------|-----|-----|-------|
| Storage Temperature Range | -40 | +85 | °C |
| Operating Temperature Range | -40 | +85 | °C |
| Input Power Level | - | +13 | dBm |
| DC Voltage Between Each Terminal | - | 15 | V |

MATCHING CIRCUIT



Component values (minimum inductor Q = 40):

$$Rp1=1.8 \text{ K}\Omega, \quad Lp1=135 \text{ nH}, \quad Cs1=9 \text{ pF}$$

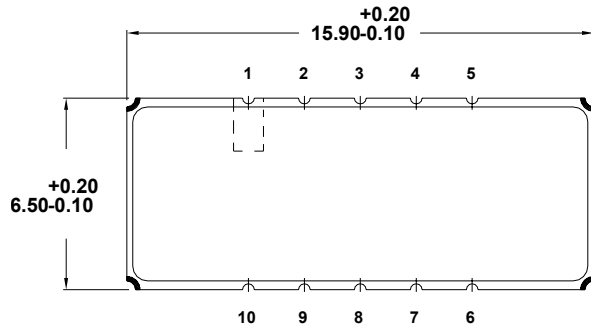
$$Rp2=1.8 \text{ K}\Omega, \quad Lp2=135 \text{ nH}, \quad Cs2=9 \text{ pF}$$

Notes:

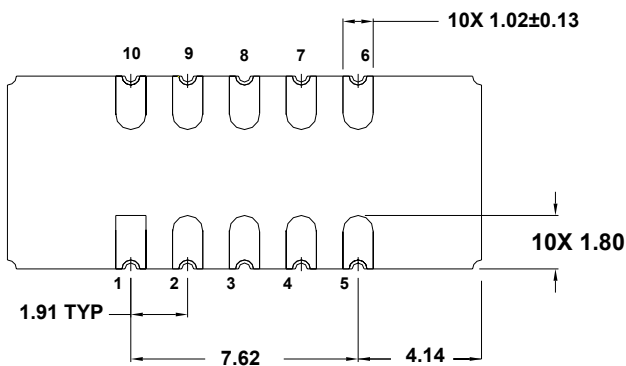
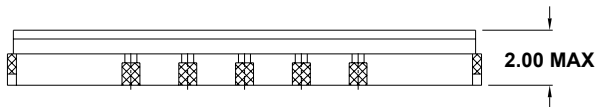
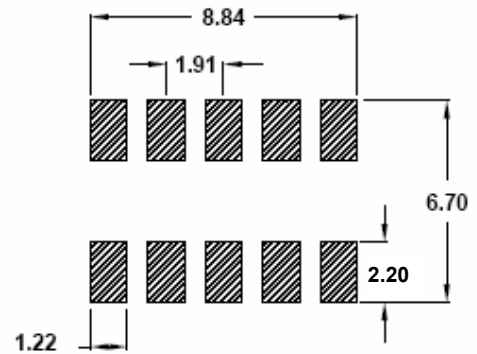
1. Component values shown above are used in the Micro Networks test fixture and are for guidance only.
2. 2% tolerance components or better are recommended.
3. Component values may change depending on board layout.

PACKAGE OUTLINE AND RECOMMENDED PCB LAYOUT

PACKAGE INFORMATION



TOP VIEW



BOTTOM VIEW

| Pad Configuration: | |
|--------------------|---------------|
| 1 | Input |
| 10 | Input Return |
| 6 | Output |
| 5 | Output Return |
| All Others | Ground |

NOTES:
DIMENSIONS SHOWN ARE ALL NOMINAL IN MILLIMETERS. ALL TOLERANCES ARE ± 0.15 MM EXCEPT OVERALL LENGTH AND WIDTH

Package Material:
Body: Al_2O_3 ceramic
Lid: Kovar, Ni plated
Terminations: Au plating 1 μ m min,
over a 1.3-8.9 μ m Ni plating



All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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