

RF Pulse Transformer

500 kHz - 1 GHz



TP-105
Rev. V4

Features

- 50 Ω Unbalanced / 12.5 Ω Balanced
- 0.4 dB Insertion Loss
- 1.1:1 VSWR
- MIL-STD-202 Screening Available

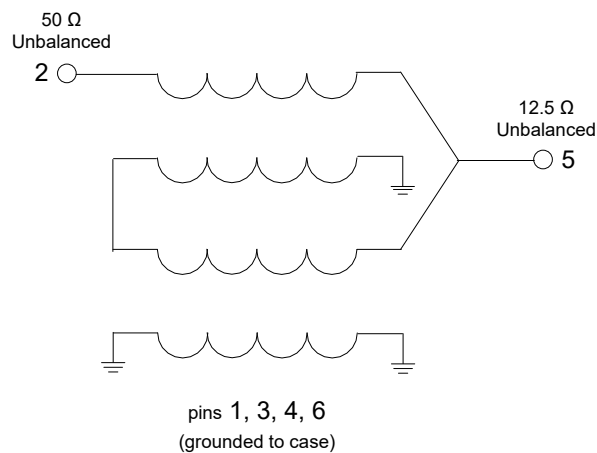
Applications

- Aerospace & Defense
- ISM

Description

The transformer coupled balun can provide a wide frequency range. DC isolation from primary coil to secondary coil is also a feature of this device.

Functional Schematic



Electrical Specifications: $T_A = -55^\circ\text{C} - +85^\circ\text{C}$

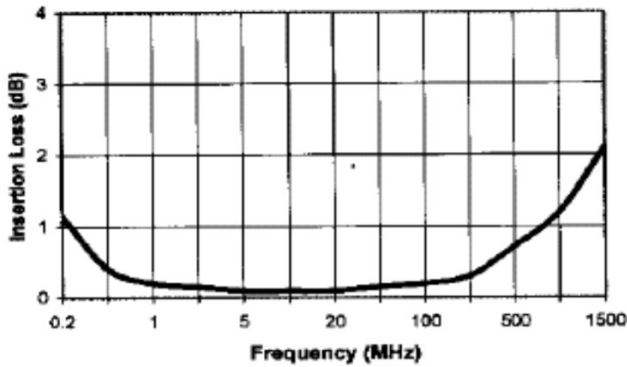
| Parameter | Test Conditions | Units | Min. | Typ. | Max. |
|----------------|---|----------|------|------------|----------------------|
| Impedance | Input: Unbalanced Output: Unbalanced | Ω | — | 50 12.5 | — |
| Insertion Loss | 10 - 50 MHz | dB | — | — | 0.5 |
| VSWR | 1 - 500 MHz 500 kHz - 1 GHz | Ratio | — | — | 1.4:1 1.6:1 |
| Input Power | 500 kHz - 1 MHz 1 MHz - 5 MHz 5 MHz - 1 GHz | W | — | — | 0.375 0.75 1.5 |
| Rise Time | 10% - 90% | ns | — | 0.3 | — |
| Droop (10%) | — | ns | — | 350 | — |

Ordering Information

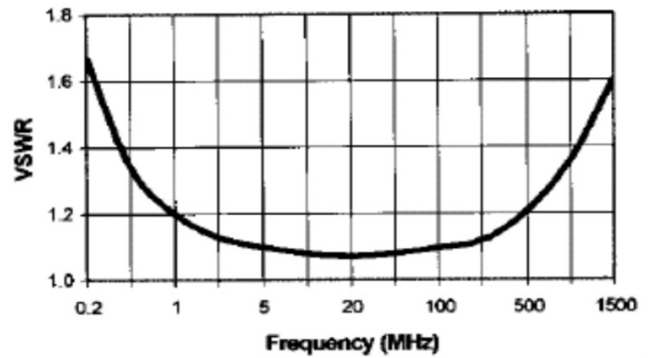
| Part Number | Package |
|-------------|-------------|
| TP-103-PIN | tape & reel |

Typical Performance Curves

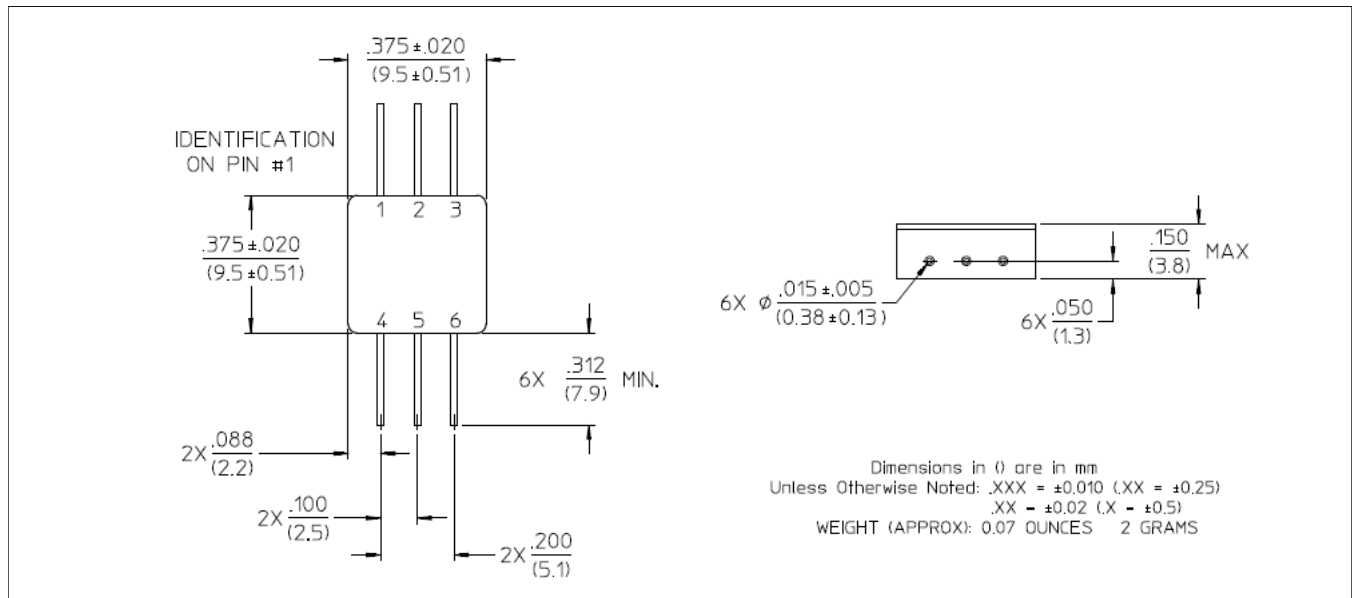
Insertion Loss



VSWR



Outline (FP-1)



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