

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

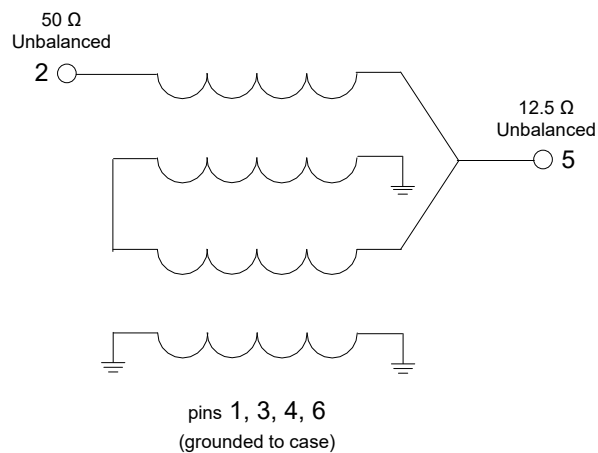
Applications

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

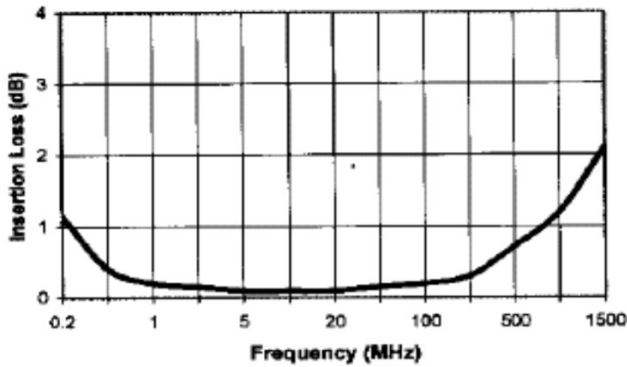
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Impedance	Input: Unbalanced Output: Unbalanced	Ω	—	50 12.5	—
Insertion Loss	10 - 50 MHz	dB	—	—	0.5
VSWR	1 - 500 MHz 500 kHz - 1 GHz	Ratio	—	—	1.4:1 1.6:1
Input Power	500 kHz - 1 MHz 1 MHz - 5 MHz 5 MHz - 1 GHz	W	—	—	0.375 0.75 1.5
Rise Time	10% - 90%	ns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

Ordering Information

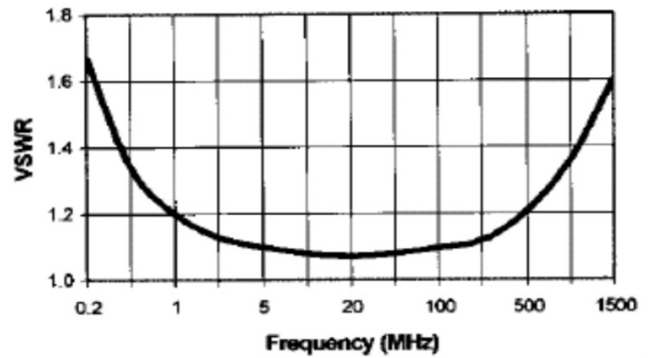
Part Number	Package
TP-103-PIN	tape & reel

Typical Performance Curves

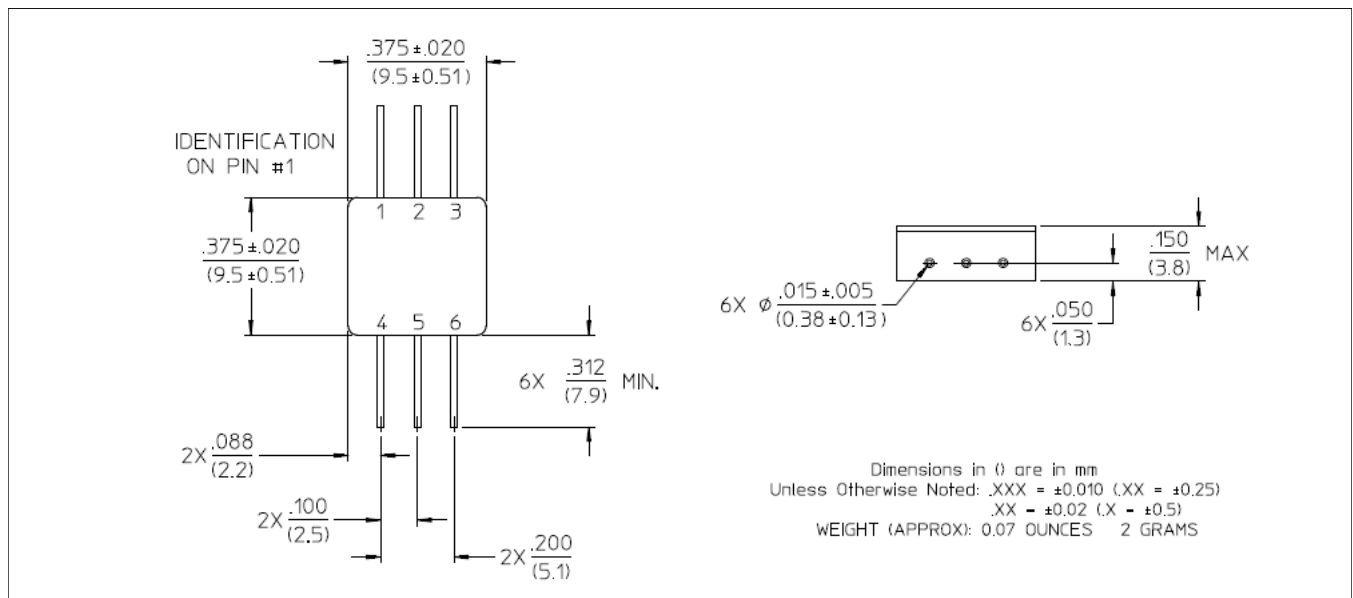
Insertion Loss



VSWR



Outline (FP-1)



MACOM Technology Solutions Inc. ("MACOM"). All rights reserved.

These materials are provided in connection with MACOM's products as a service to its customers and may be used for informational purposes only. Except as provided in its Terms and Conditions of Sale or any separate agreement, MACOM assumes no liability or responsibility whatsoever, including for (i) errors or omissions in these materials; (ii) failure to update these materials; or (iii) conflicts or incompatibilities arising from future changes to specifications and product descriptions, which MACOM may make at any time, without notice. These materials grant no license, express or implied, to any intellectual property rights.

THESE MATERIALS ARE PROVIDED "AS IS" WITH NO WARRANTY OR LIABILITY, EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHT, ACCURACY OR COMPLETENESS, OR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.