RF Pulse Transformer 500 kHz - 1 GHz



TP-103

Rev. V5

Features

- 50 Ω Unbalanced / 200 Ω Unbalanced
- 0.4 dB Insertion Loss
- 0.18 ns Rise Time
- 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



pins 1, 3, 4, 6 (grounded to case)

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Impedance	Input: Unbalanced Output: Balanced	Ω	—	50 200	—
Insertion Loss	10 - 50 MHz	dB	—	—	0.6
VSWR	2 - 500 MHz 500 kHz - 1 GHz	Ratio	_		1.4:1 2.0:1
Input Power	500 kHz - 1 MHz 1 MHz - 5 MHz 5 MHz - 1 GHz	W	_	_	1.0 1.5 3.0
Rise Time	10% - 90%	ns	_	0.18	—
Droop (10%)	_	ns		160	_

Electrical Specifications: T_A = -55°C - +85°C

Ordering Information

Part Number	Package	
TP-103-PIN	tape & reel	

MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

RF Pulse Transformer 500 kHz - 1 GHz



TP-103 Rev. V5

Typical Performance Curves



Insertion Loss



Outline (FP-1)



MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

For further information and support please visit: <u>https://www.macom.com/support</u>

2



TP-103 Rev. V5

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.

³

MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Signal Conditioning category:

Click to view products by MACOM manufacturer:

Other Similar products are found below :

MAPDCC0001 MAPDCC0004 PD0409J5050S2HF 880157 HHS-109-PIN DC1417J5005AHF AFS14A30-2185.00-T3 AFS14A35-1591.50-T3 DS-323-PIN B39321R801H210 1A0220-3 JP510S LFB212G45SG8C341 LFB322G45SN1A504 LFL182G45TC3B746 SF2159E 30057 FM-104-PIN CER0813B MAPDCC0005 3A325 40287 41180 ATB3225-75032NCT BD0810N50100AHF BD2425J50200AHF C5060J5003AHF JHS-115-PIN JP503AS DC0710J5005AHF DC2327J5005AHF DC3338J5005AHF 43020 LFB2H2G60BB1C106 LFL15869MTC1B787 X3C19F1-20S XC3500P-20S 10013-20 SF2194E CDBLB455KCAX39-B0 TGL2208-SM, EVAL RF1353C PD0922J5050D2HF 1E1305-3 1G1304-30 B0922J7575AHF 2020-6622-20 TP-102-PIN TP-103-PIN BD1222J50200AHF