

Silicon Switching Diode

Rev. V1

Features

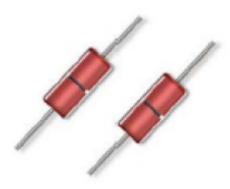
- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/116
- · Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

Maximum Ratings

Operating & Storage Temperature: -65°C to +175°C

Operating Current: 200 mA @ T_A = +75°C Derating Factor: 1.14 mA/°C above T_A = +25°C Surge Current A: 2.0 A, sinewave, Pw = 8.3 ms

DC Reverse Voltage (V_{RWM}): 75 V



DC Electrical Characteristics

VF				IR				VBR			
Ambient (°C)	IF mA	Min. V	Max. V	Ambient (°C)	V (dc)	Min. A	Max. A	Ambient (°C)	IR mA	Min. V	Max. V
25	10	_	8.0	25	20	_	0.025	25	100	100	25
25	100	_	1.2	25	75	_	0.500				
150	10	_	8.0	150	20	_	35.0				
-55	100	_	1.3	150	75	_	75.0				

AC Electrical Characteristics @ 25°C

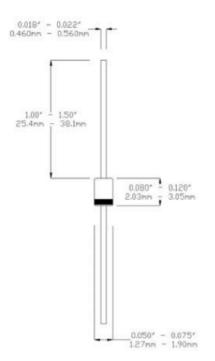
Parameter	Symbol	Maximum
Capacitance @ 0 V	pF	4
Capacitance @ 1.5 V	pF	2.8
T_{RR} @ $I_F = I_R = 10$ mA, $I_{REC} = 1$ mA	nsec	5
T _{FR} @ IF = 50 mA	nsec	20
V _{FR} @ IF = 50 mA	V(pk)	5



Silicon Switching Diode

Rev. V1

Outline Drawing



LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/116, DO -34

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\Theta,JL}$): 250 °C/W maximum at L = 0.375 in

THERMAL IMPEDANCE: (Z_{OJX}): 70 °C/W maximum

POLARITY: Cathode end is banded.

1N4531



Silicon Switching Diode

Rev. V1

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE 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.