

Silicon Switching Diode

Rev. V1

Features

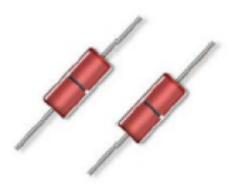
- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/116
- · Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

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

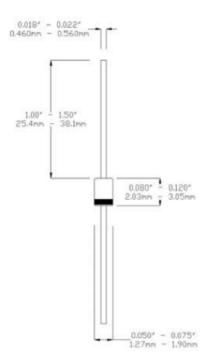
Parameter	Symbol	Maximum
Capacitance @ 0 V	pF	4
Capacitance @ 1.5 V	pF	2.8
T_{RR} @ $I_F = I_R = 10 \text{ mA}$, $I_{REC} = 1 \text{ mA}$	nsec	5
T _{FR} @ IF = 50 mA	nsec	20
V _{FR} @ IF = 50 mA	V(pk)	5



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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



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