

Silicon Switching Diode Series

1N4531

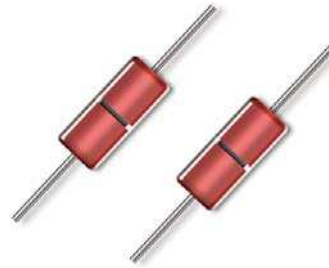


Features

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

Maximum Ratings @ 25°C

Operating & Storage Temperature: -65°C to +175°C
 Surge Current A, sine 8.3ms: 2.0 A
 Surge Current B, square 8.3ms: 0.704 A
 Operating Current: 200mA, $T_A = +75^\circ\text{C}$
 Derating Factor: 2.0 mA/°C above $T_A = +25^\circ\text{C}$
 D.C. Reverse Voltage (VRWM): 75V



DC Electrical Characteristics

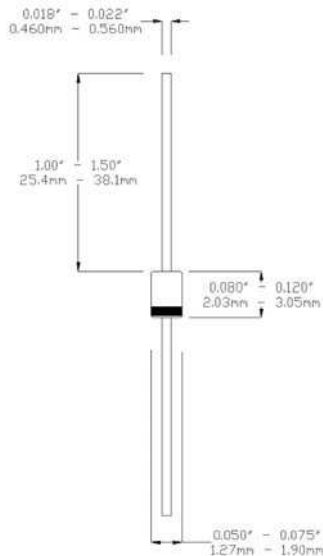
V_F				I_R				V_{BR}			
Ambient (°C)	I_F mA	Minimum V	Maximum V	Ambient (°C)	V (dc)	Minimum A	Maximum A	Ambient (°C)	I_R μA	Minimum V	Maximum V
25	10	---	0.8	25	20	---	0.025	25	100	100	25
25	100	---	1.2	25	75	---	0.500				
150	10	---	0.8	150	20	---	35.0				
-55	100	---	1.3	150	75	---	75.0				

AC Electrical Characteristics @ 25°C

	Symbol	Maximum	Maximum
Capacitance @ 0V	pF	---	4
Capacitance @ 1.5V	pF	---	2.8
TRR @ $I_F = I_R = 10\text{mA}$, $I_{Rec} = 1\text{mA}$.	nsec	---	5
TFR @ $I_F = 50\text{mA}$	nsec	---	20
VFR @ $I_F = 50\text{mA}$	V(pk)	---	5



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: ($Z_{\theta JX}$): 70 °C/W maximum

POLARITY: Cathode end is banded.

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