

Silicon Switching Diode Series

1N4454 and 1N4454-1



Features

- Available in JAN, JANTX, and JANTXV per MIL-PRF-19500/144
- Metallurgically Bonded
- Hermetically Sealed
- Double Plug Construction

Maximum Ratings @ 25°C

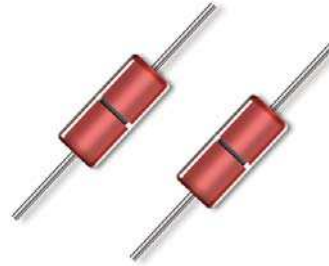
Operating & Storage Temperature: -55 °C to +175 °C

Operating Current: 200mA, $T_A = +75$ °C

Derating Factor: 2.0mA dc/°C above $T_A = +75$ °C @ $L = 3/8$

Surge Current A: 2A (pk) $t_p = 8.3$ mS, $V_{RM} = 0$

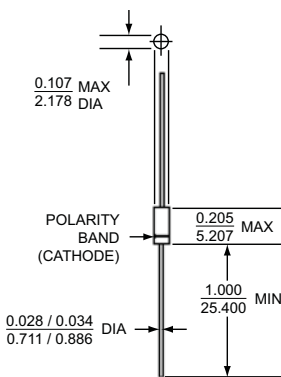
Surge Current B: 4A (pk) $t_p = 1$ us, $V_{RM} = 0$



DC Electrical Characteristics

V_{BR} @5 μ A	V_{RWM}	I_0	$V_{f1}@I_F = 10$ mA	$V_{f2}@I_F = 10$ mA $T_A = 150^\circ\text{C}$	t_{rr}	I_{R1} @ 50 V dc	I_{R2} @ 50 V $T_A = 150^\circ\text{C}$	CAPACITANCE @ 0 V
Volts	Volts (pk)	mA	V dc	V dc	n sec	μ A	μ A	pF
75	50	200	0.8	0.7	4	0.1	100	2.0

Outline Drawing



All dimensions in $\frac{\text{INCH}}{\text{mm}}$

LEADED DESIGN DATA

CASE: Hermetically sealed glass case per MIL-S-19500/144, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

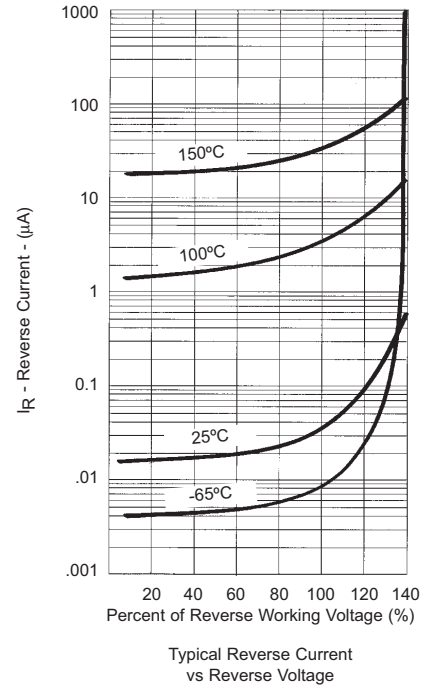
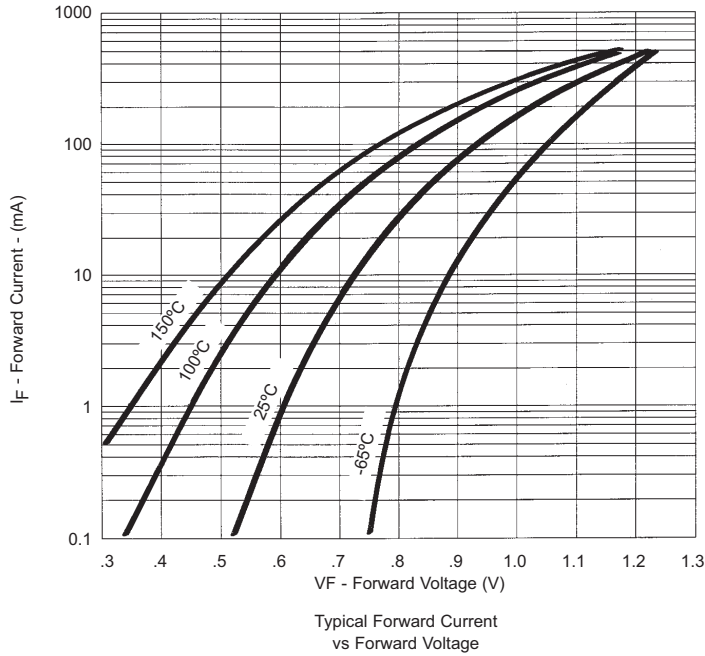
THERMAL RESISTANCE: ($R_{\theta JL}$): 250 °C/W maximum at $L = 0.375$ in

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 70 °C/W maximum

POLARITY: Cathode end is banded.



Graphs



NOTE: All temperatures shown on graphs are junction temperatures.

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