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NTE589
Silicon Rectifier
General Purpose, Fast Recovery

Features:
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Maximum Ratings and Electrical Characteristics: (T_A = +25°C, Note 1 unless otherwise specified)

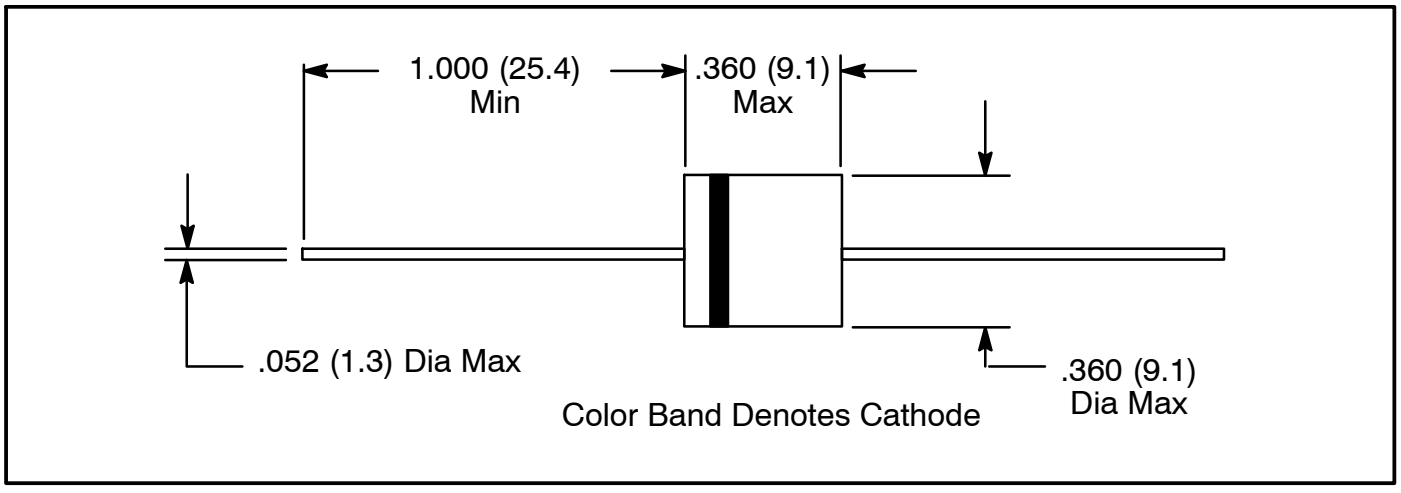
Maximum Recurrent Peak Reverse Voltage, V_{RRM} 400V
Maximum RMS Voltage, V_{RMS} 280V
Maximum DC Blocking Voltage, V_{DC} 400V
Maximum Average Forward Rectified Current (T_A = +55°C, .375" lead length), $I_{F(AV)}$ 6A
Peak Forward Surge Current, I_{FSM}
(8.3ms single half sine–wave superimposed on rated load) 250A
Maximum Instantaneous Forward Voltage (I_F = 6A), V_F 1.3V
Maximum DC Reverse Current (V_{DC} = 400V), I_R
T_A = +25°C, V_{DC} = 400V 5μA
T_A = +125°C 200μA
Maximum Reverse Recovery Time (Note 2), t_{rr} 150ns
Typical Junction Capacitance (Note 3), C_J 50pF
Typical Thermal Resistance, Junction–to–Ambient, R_{thJA} . . . . . 30°C/W
Operating Junction Temperature Range, T_J . . . . . –65° to +150°C
Storage Temperature Range, T_{stg} . . . . . –65° to +150°C

Note 1. Single phase, half wave, 60Hz. Resistive or inductive load. For capacitive load, derate current by 20%.

Note 2. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.

Note 3. Measured at 1MHz and applied reverse voltage of 4 VDC.

Note 4. Mount on Cu–Pad Size 16mm x 16mm on PCB.



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RoHS