

## NTE156 General Purpose Silicon Rectifier

**Features:**

- Low Leakage
- Low Forward Voltage Drop
- High Current Capability

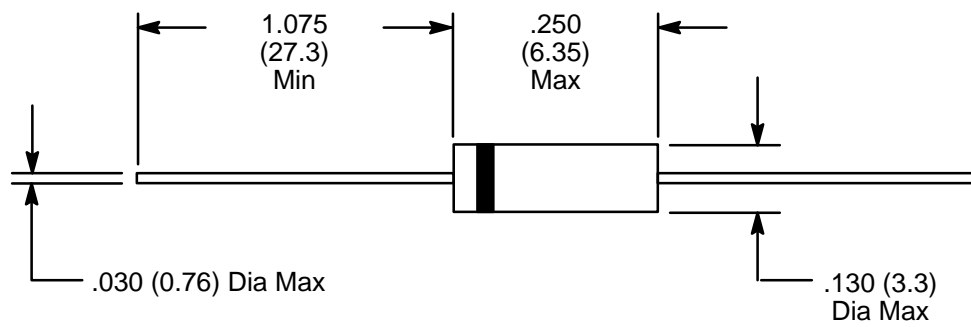
**Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Peak Repetitive Reverse Voltage, $V_{RRM}$ .....	1000V
DC Blocking Voltage, $V_R$ .....	1000V
RMS Reverse Voltage, $V_{R(RMS)}$ .....	700V
Average Rectified Forward Current, $I_O$ (.375" (9.5mm) lead length, $T_A = +50^\circ\text{C}$ ) .....	2A
Non-Repetitive Peak Surge Current, $I_{FSM}$ (8.3ms single half sine-wave superimposed on rated load) .....	70A
Operating Junction Temperature Range, $T_J$ .....	$-65^\circ$ to $+175^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+175^\circ\text{C}$
Typical Thermal Resistance, Junction-to-Ambient, $R_{thJA}$ .....	$50^\circ\text{C/W}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Maximum Instantaneous Forward Voltage Drop	$V_F$	$I_F = 2A$	-	-	1.1	V
Maximum Reverse Current	$I_R$	$V_{RRM} = 1000V, T_J = +25^\circ\text{C}$	-	-	5.0	$\mu A$
		$V_{RRM} = 1000V, T_J = +100^\circ\text{C}$	-	-	50	$\mu A$
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	$T_L +75^\circ\text{C}, .375 (9.5) \text{ leads}$	-	-	30	$\mu A$
Typical Junction Capacitance	$C_j$	Note 1	-	40	-	pF

Note 1. Measured at 1MHz and applied reverse voltage of 4.0 volts.



Color Band Denotes Cathode