

## NTE116 General Purpose Silicon Rectifier

### **Description:**

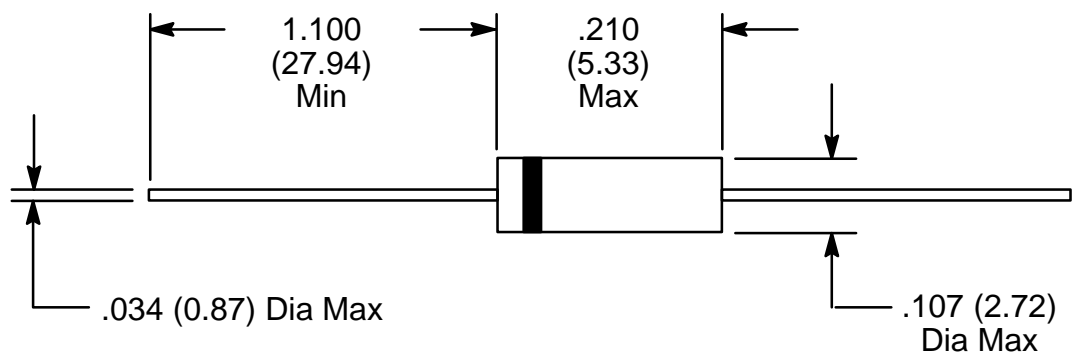
The NTE116 is a general purpose silicon rectifier in a DO-41 case designed for low power and switching applications.

### **Absolute Maximum Ratings:**

Peak Repetitive Reverse Voltage, $V_{RRM}$	600V
Working Peak Reverse Voltage, $V_{RWM}$	600V
DC Blocking Voltage, $V_R$	600V
Non-Repetitive Peak Reverse Voltage (Halfwave, Single Phase, 60Hz), $V_{RSM}$	720V
RMS Reverse Voltage, $V_{R(RMS)}$	420V
Average Rectified Forward Current, $I_O$ (Single Phase, Resistive Load, 60Hz, $T_A = +75^\circ\text{C}$ )	1A
Non-Repetitive Peak Surge Current, $I_{FSM}$ (Surge applied at rated load conditions for 1 cycle)	30A
Operating Junction Temperature Range, $T_J$	$-65^\circ$ to $+175^\circ\text{C}$
Storage Temperature Range, $T_{stg}$	$-65^\circ$ to $+175^\circ\text{C}$
Maximum Lead Temperature, $T_L$ (During Soldering, 3/8" from case for 10sec at 5lbs tension)	$+350^\circ\text{C}$

### **Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Maximum Instantaneous Forward Voltage Drop	$V_F$	$i_F = 1\text{A}$ , $T_J = +25^\circ\text{C}$	—	0.93	1.1	V
Maximum Full-Cycle Average Forward Voltage Drop	$V_{F(AV)}$	$I_O = 1\text{A}$ , $T_L +75^\circ\text{C}$ , 1" leads	—	—	0.8	V
Maximum Reverse Current	$I_R$	$V_{RRM} = 600\text{V}$ , $T_J = +25^\circ\text{C}$	—	0.05	10	$\mu\text{A}$
		$V_{RRM} = 600\text{V}$ , $T_J = +100^\circ\text{C}$	—	1.0	50	$\mu\text{A}$
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	$I_O = 1\text{A}$ , $T_L +75^\circ\text{C}$ , 1" leads	—	—	30	$\mu\text{A}$



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