



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## 1N4245 thru 1N4249 General Purpose Silicon Rectifier DO-41 Type Package

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Working Peak Reverse Voltage ( $T_J = -65^\circ$  to  $+175^\circ\text{C}$ ),  $V_{RWM}$

1N4245 .....	200V
1N4246 .....	400V
1N4247 .....	600V
1N4248 .....	800V
1N4249 .....	1000V

DC Blocking Voltage ( $T_J = -65^\circ$  to  $+175^\circ\text{C}$ ),  $V_R$

1N4245 .....	200V
1N4246 .....	400V
1N4247 .....	600V
1N4248 .....	800V
1N4249 .....	1000V

Average Forward Current,  $I_O$

$T_A = +55^\circ\text{C}$ .....	1A
$T_A = +25^\circ\text{C}$ .....	2.5A

Non-Repetitive Peak Surge Current (0.0083sec, Half Sine Wave),  $I_{FSM}$  ..... 25A

Non-Repetitive Peak Surge Current (0.001sec, Half Sine Wave),  $I_{FSM}$

Full Load, $T_J = +160^\circ\text{C}$ .....	90A
No Load, $T_A = +25^\circ\text{C}$ .....	100A

$I^2t$ , RMS for Fusing (0.001 to 0.01sec),  $I^2t$  ..... 4A<sup>2</sup>sec

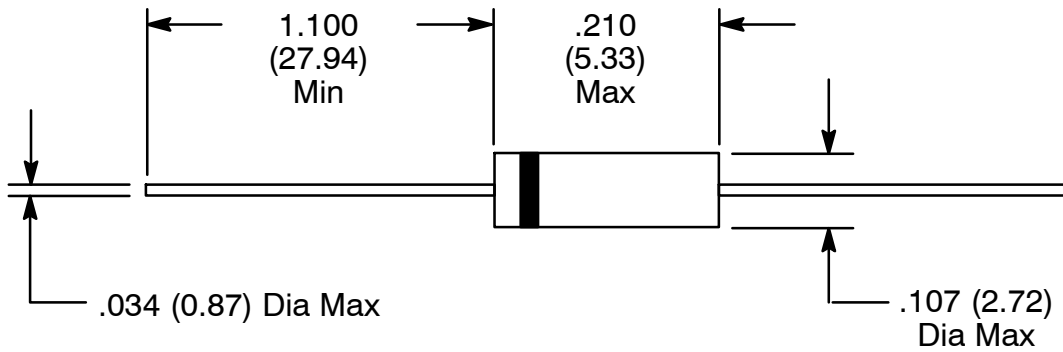
Peak Non-Repetitive Reverse Power Rating (20 $\mu$ s, Half Sine wave,  $T_J = \text{Max}$ ),  $P_{RM}$  ..... 1000W

Operating Junction Temperature Range,  $T_J$  .....  $-65^\circ$  to  $+160^\circ\text{C}$

Storage Temperature Range,  $T_{stg}$  .....  $-65^\circ$  to  $+200^\circ\text{C}$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage Drop	$V_F$	$I_F = 1\text{A}$ , $T_A = +55^\circ\text{C}$	-	-	1.2	V
Reverse Current	$I_{RM}$	$V_{RRM} = \text{Rated Voltage}$ , $T_J = +25^\circ\text{C}$	-	-	1.0	$\mu\text{A}$
		$V_{RRM} = \text{Rated Voltage}$ , $T_J = +125^\circ\text{C}$	-	-	25	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$		-	2.5	5.0	$\mu\text{s}$



Color Band Denotes Cathode