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

NTE571
General Purpose Silicon Rectifier
Soft Recovery Controlled Avalanche

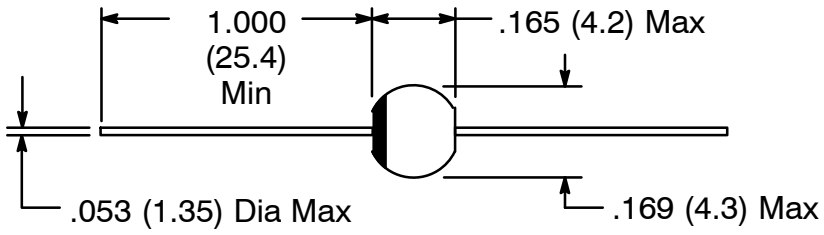
Absolute Maximum Ratings:

Repetitive Peak Reverse Voltage, V_{RRM} 1000V
Continuous Reverse Voltage, V_R 1000V
Average Forward Rectified Current, $I_{F(AV)}$
.394" (10mm) lead length, T_{tp} = +55°C 2.9A
T_A = +65°C 1.2A
Repetitive Peak Forward Current, I_{FRM}
T_{tp} = +55°C 33A
T_A = +65°C 11A
Non–Repetitive Peak Forward Current, I_{FSM}
t = 10ms, half sine–wave, T_J = +175°C prior to surge, V_R = 1000V 65A
Non–Repetitive Peak Reverse Avalanche Energy, E_{RSM}
I_R = 400mA, T_J = +175°C prior to surge; with inductive load off 10mJ
Operating Junction Temperature Range, T_J . . . . . –65° to +175°C
Storage Temperature Range, T_{stg} . . . . . –65° to +175°C
Thermal Resistance, Junction–to–Tie Point (10mm lead length), R_{thjtp} 25K/W
Thermal Resistance, Junction–to–Ambient, R_{thja}
Mounted on 1.5mm thick PC Board, Cu–thickness > 40µm 75K/W

Electrical Characteristics: (T_J = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage Drop	V_F	I_F = 3A, T_J = +175°C, Note 1	–	–	1.28	V
		I_F = 3A, Note 1	–	–	1.78	V
Reverse Avalanche Breakdown Voltage	$V_{(BR)R}$	I_R = 0.1mA	1100	–	–	V
Reverse Current	I_R	V_R = 1000V	–	–	5	µA
		V_R = 1000V, T_J = +165°C	–	–	150	µA
Reverse Recovery Time	t_{rr}	when switched from I_F = 0.5A to I_R = 1A measured at I_R = 0.25A	–	–	150	ns

Note 1. Measured under pulse conditions to avoid excessive dissipation.



Color Band Denotes Cathode