



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

NTE558 General Purpose Fast Recovery Silicon Rectifier

Description:

The NTE558 is a general purpose silicon rectifier in a DO41 type case designed for low high voltage fast recovery applications.

Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM}	1500V
DC Blocking Voltage, V_R	1500V
RMS Reverse Voltage, $V_{R(RMS)}$	1050V
Average Rectified Forward Current, I_O (Single Phase, Resistive Load, 60Hz, $T_A = +75^\circ C$)	0.5A
Peak Forward Surge Current, I_{FSM} (8.3ms Single Half Sine-Wave Superimposed on Rated Load)	30A
Operating Junction Temperature Range, T_J	-55° to $+150^\circ C$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ C$

Electrical Characteristics: ($T_A = +25^\circ C$ unless otherwise specified. Single Phase, Half Wave, 60Hz, Resistive or Inductive Load)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Maximum Instantaneous Forward Voltage Drop	V_F	$I_O = 500mA, T_J = +50^\circ C$	-	-	2.4	V
Maximum DC Reverse Current	I_R	$V_R = 1500V, T_A = +25^\circ C$	-	-	5	μA
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	Full Cycle, $T_L +55^\circ C$, .375" (9.5mm) lead length	-	-	100	μA
Maximum Reverse Recovery Time	t_{rr}	$I_F = 500mA, I_R = 1A, I_{RR} = 250mA$	-	-	500	ns
Typical Junction capacitance	C	Note 1	-	20	-	pF

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

