



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

## NTE6093 Silicon Rectifier Dual, Schottky Barrier 60V, 60 Amp, TO3P

**Description:**

The NTE6093 is a silicon rectifier in a TO3P type package designed using the Schottky Barrier principle with a Molybdenum barrier metal.

**Features:**

- Low Forward Voltage
- Guard-Ring for Stress Protection
- Low Power Loss & High Efficiency
- Guarantee Reverse Avalanche
- +125°C Operating Junction Temperature
- High Surge Capacity
- Low Stored Charge majority Carrier Conduction
- Low Switching Noise

**Absolute Maximum Ratings:**

Peak Repetitive Reverse Voltage, $V_{RRM}$ .....	60V
Working Peak Reverse Voltage, $V_{RWM}$ .....	60V
DC Blocking Voltage, $V_R$ .....	60V
RMS Reverse Voltage, $V_{R(RMS)}$ .....	42V
Average Rectifier Forward Current ( $V_R = 60V$ , $T_C = +125^\circ C$ ), $I_{F(AV)}$	
Per Diode .....	30A
Total Device .....	60A
Peak Repetitive Forward Current ( $V_R = 60V$ , Square Wave, $T_C = +125^\circ C$ ), $I_{FM}$ .....	60A
Non-Repetitive Peak Surge Current, $I_{FSM}$	
(Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60Hz) .....	600A
Operating Junction Temperature Range, $T_J$ .....	-65° to +125°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +125°C

**Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	$V_F$	$I_F = 30A, T_C = +25^\circ C$	-	-	0.63	V
		$I_F = 30A, T_C = +125^\circ C$	-	-	0.75	V
Instantaneous Reverse Current	$I_R$	$V_R = 60V, T_C = +25^\circ C$	-	-	10	$\mu A$
		$V_R = 60V, T_C = +100^\circ C$	-	-	150	$\mu A$

