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

NTE6088
Silicon Dual Schottky Rectifier
60V, 30 Amp, TO220

Description:

The NTE6088 is a silicon dual power rectifier in a TO220 type package designed using the Schottky Barrier principle with a platinum barrier metal.

Features:

- Low Power Loss, High Efficiency
- Guarding for Stress Protection
- Low Forward Voltage
- +150°C Operating Junction Temperature
- High Surge Capacity

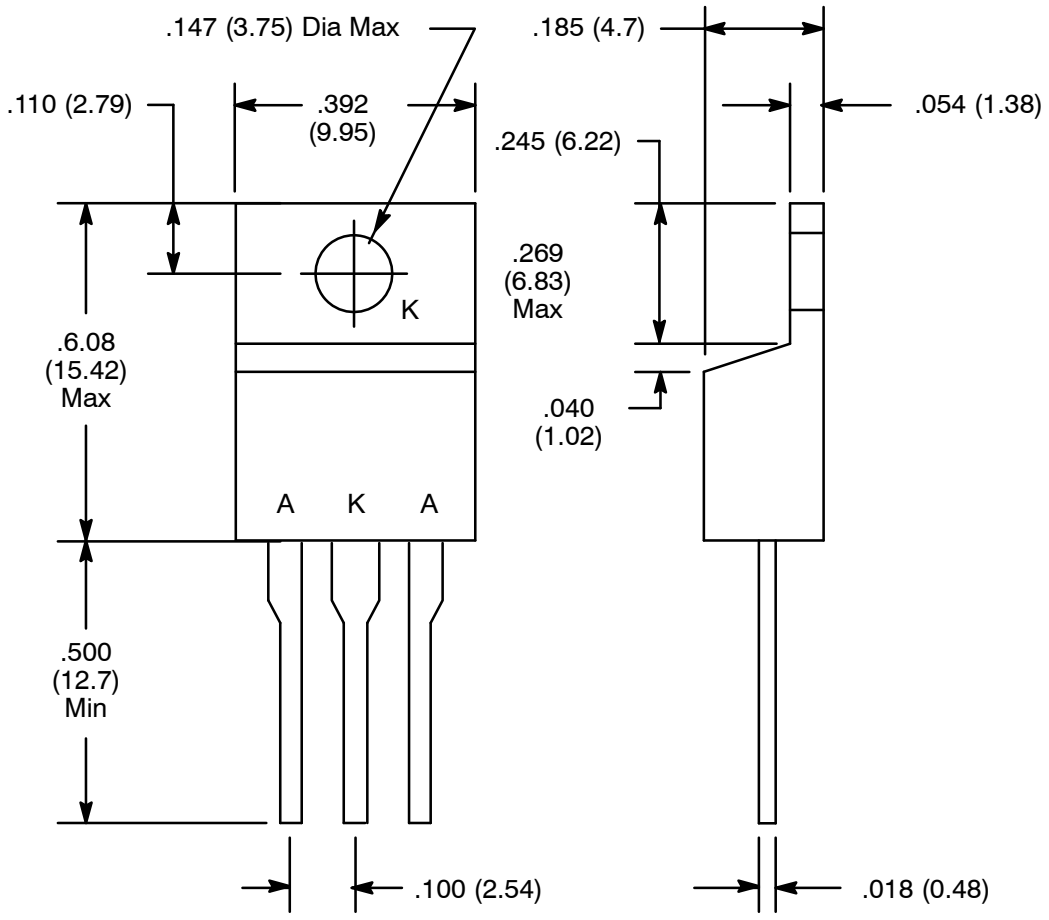
Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Peak Repetitive Reverse Voltage, V_{RRM} 60V
Working Peak Reverse Voltage, V_{RWM} 60V
DC Blocking Voltage, V_R 60V
Average Rectified Forward Current (T_C = +125°C), $I_{F(AV)}$ 30A
Peak Repetitive Forward Current, I_{FRM}
(Per Diode Leg, V_R = 60V, Square Wave, 20kHz, T_C = +125°C) 30A
Non−Repetitive Peak Surge Current, I_{FSM}
(8.3ms Single Half Sinewave Superimposed on Rated Load) 150A
Peak Repetitive Reverse Current (2μs, 1kHz), I_{RRM} 0.5A
Operating Junction Temperature Range, T_J . . . . . −65° to +150°C
Storage Temperature Range, T_{stg} . . . . . −65° to +175°C
Voltage Rate of Change (V_R = 60V), dv/dt 1000V/μs
Typical Thermal Resistance (Per Leg), Junction−to−Case, R_{thJC} . . . . . 1.5°C/W

Electrical Characteristics (Per Leg): (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	v_F	I_F = 15A	–	–	0.75	V
		I_F = 15A, T_C = +125°C, Note 1	–	–	0.65	V
Instantaneous Reverse Current	i_R	V_R = 60V, T_C = +25°C, Note 1	–	–	1	mA
		V_R = 60V, T_C = +125°C, Note 1	–	–	50	mA

Note 1. Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2%.


.147 (3.75) Dia Max
.185 (4.7)
.110 (2.79)
.392
(9.95)
.054 (1.38)
.245 (6.22)
.269
(6.83)
Max
K
.6.08
(15.42)
Max
.040
(1.02)
A K A
.500
(12.7)
Min
.100 (2.54)
.018 (0.48)