ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE6087
Schottky Barrier Silicon Rectifier

Features:
- Guarding for Stress Protection
- Low Forward Voltage
- +150°C Operating Junction Temperature
- Guaranteed Reverse Avalanche

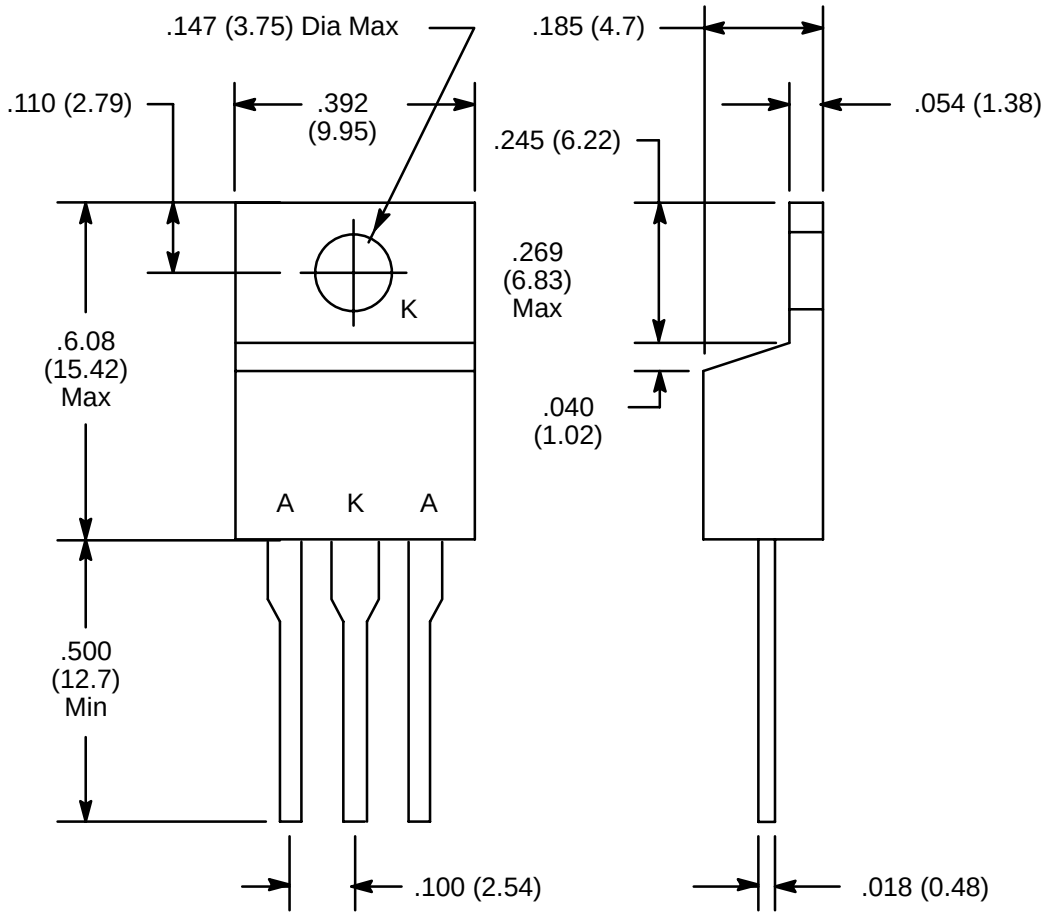
Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM} 45V
Working Peak Reverse Voltage, V_{RWM} 45V
DC Blocking Voltage, V_R 45V
Average Rectified Forward Current (V_R = 45V, T_C = +130°C), $I_{F(AV)}$ 30A
Peak Repetitive Forward Current, I_{FRM}
(Per Diode Leg, V_R = 45V, Square Wave, 20kHz, T_C = +130°C) 30A
Non–Repetitive Peak Surge Current, I_{FSM}
(Per Diode Leg, Surge applied at rated load conditions halfwave, single phase, 60Hz) 150A
Peak Repetitive Reverse Surge Current (2µs, 1kHz), I_{RRM} 1A
Voltage Rate of Change (V_R = 45V), dv/dt 1000V/µs
Operating Junction Temperature Range, T_J . . . . . –65° to +150°C
Storage Temperature Range, T_{stg} . . . . . –65° to +175°C
Maximum Thermal Resistance, Junction–to–Case (Per Diode Leg), R_{thJC} . . . . . 1.5°C/W

Electrical Characteristics: (Per Diode Leg)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	v_F	i_F = 30A, T_C = +125°C, Note 1	–	–	0.73	V
		i_F = 30A, T_C = +25°C, Note 1	–	–	0.82	V
Instantaneous Reverse Current	i_R	V_R = 45V, T_C = +125°C, Note 1	–	–	40	mA
		V_R = 45V, T_C = +25°C, Note 1	–	–	0.2	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)