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NTE6084
Silicon Rectifier
Schottky Barrier
45V, 35 Amp, DO4

Description:

The NTE6084 is a silicon power rectifier in a DO4 type package designed using the Schottky Barrier principle with a platinum barrier metal.

Features:

- Guardring for Stress Protection
- Low Forward Voltage
- +150°C Operating Junction Temperature Capability
- Guaranteed Reverse Avalanche

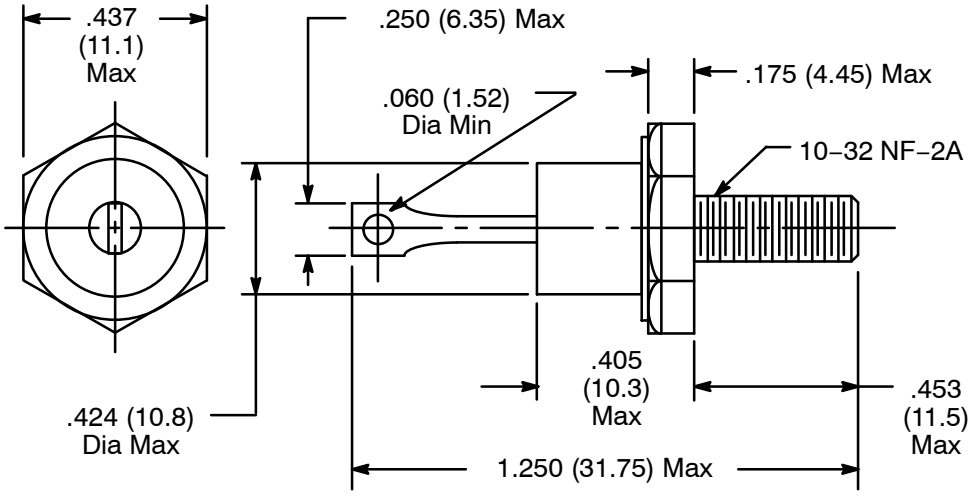
Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM} 45V
Working Peak Reverse Voltage, V_{RWM} 35V
DC Blocking Voltage, V_R 45V
Average Rectified Forward Current (V_R = 45V, T_C = +105°C), I_O 30A
Non–Repetitive Peak Surge Current, I_{FSM}
(Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz) 600A
Peak Repetitive Reverse Surge Current (2.0μs, 1.0kHz), I_{RRM} 2A
Voltage Rate of Change (V_R = 45V), dv/dt 700V/μs
Peak Operating Junction Temperature (Forward Current Applied), $T_{J(pk)}$ . . . . . +150°C
Operating Junction Temperature Range, T_J . . . . . –55° to +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C
Maximum Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 2.0°C/W

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Maximum Instantaneous Forward Voltage	v_F	i_F = 30A, T_C = +125°C, Note 1	–	–	0.55	V
Maximum Instantaneous Reverse Current	i_R	V_R = 35V, T_C = +125°C, Note 1	–	–	125	mA
Capacitance	C_t	V_R = 5V, 100kHz ≤ f ≤ 1MHz	–	–	2000	pF

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


.437
(11.1)
Max
.250 (6.35) Max
.175 (4.45) Max
.060 (1.52)
Dia Min
10–32 NF–2A
.405
(10.3)
Max
.453
(11.5)
Max
.424 (10.8)
Dia Max
1.250 (31.75) Max