

NTE6082 Silicon Schottky Barrier Rectifier

Description:

The NTE6082 is a silicon switchmode power rectifier using the Schottky Barrier principle with a platinum barrier metal.

Features:

- Guardring for Stress Protection
- Low Forward Voltage
- +150°C Operating Junction Temperature

Maximum and Electrical Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified. Resistive or inductive load. For capacitive or inductive load, derate current by 20%)

Maximum Peak Repetitive Reverse Voltage, V_{RRM}	60V
Maximum Working Peak Reverse Voltage, V_{RWM}	60V
Maximum DC Blocking Voltage, V_R	60V
Maximum Average Rectified Forward Current ($T_C = +125^\circ\text{C}$), $I_{F(AV)}$	16A
Peak Repetitive Forward Current ($V_R = 60\text{V}$, Square Wave, 20kHz, $T_C = +125^\circ\text{C}$), I_{FRM}	32A
Non-Repetitive Peak Surge Current, I_{FSM} (8.3ms single half sinewave superimposed on rated load)	150A
Peak Repetitive Reverse Surge Current (2.0 μs , 1.0kHz), I_{RRM}	500mA
Operating Junction Temperature Range, T_J	-65° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+150^\circ\text{C}$
Voltage Rate of Change ($V_R = 60\text{V}$), dv/dt	1000V/ μs
Maximum Thermal Resistance, Junction-to-Case, R_{thJC}	3°/W
Maximum Instantaneous Forward Voltage (Per Leg, $I_F = 16\text{A}$), V_F	
$T_C = +125^\circ\text{C}$ (Note 1)	0.65V
$T_C = +25^\circ\text{C}$	0.75V
Maximum Instantaneous Reverse Current (Rated DC Voltage), I_R	
$T_C = +125^\circ\text{C}$	50mA
$T_C = +25^\circ\text{C}$	1mA

Note 1. Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2\%$.

