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NTE620

Silicon Rectifier, General Purpose, High Voltage, Standard Recovery (Surface Mount)

Features:

- High Temperature Metallurgically Bonded
- Glass Passivated Junction
- High Temperature Soldering Guaranteed:
+450°C/5 Seconds at Terminals. Complete Device Submersible Temperature of
+260°C/10 Seconds in Solder Bath.

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified.
60Hz, resistive or inductive load. For capacitive load, derate current by 20%).

Maximum Recurrent Peak Reverse Voltage, V_{RRM}	400V
Maximum RMS Voltage, V_{RMS}	280V
Maximum DC Blocking Voltage, V_{DC}	400V
Maximum Average Forward Rectified Current ($T_T = +75^\circ\text{C}$), $I_{T(AV)}$	0.5A
Peak Forward Surge Current, I_{FSM} (8.3ms Single Half Sine-Wave Superimposed on Rated Load)	10A
Maximum Instantaneous Forward Voltage ($I_T = 0.5\text{A}$), V_F	1.2V
Maximum DC Reverse Current ($V_{DC} = 400\text{V}$), I_R $T_A = +25^\circ\text{C}$	5 μA
$T_A = +125^\circ\text{C}$	50 μA
Maximum Full Load Reverse Current (Full Cycle Average at $T_A = +75^\circ\text{C}$), $I_{R(AV)}$	20 μA
Typical Junction Capacitance (Note 1), C_J	7pF
Operating Junction Temperature Range, T_J	-65° to +175°C
Storage Temperature Range, T_{stg}	-65° to +175°C
Maximum Thermal Resistance, Junction-to-Terminal (Note 2), R_{thJL}	70°C/W
Maximum Thermal Resistance, Junction-to-Ambient (Note 3), R_{thJA}	150°C/W

Note 1. Measured at 1MHz and applied reverse voltage of 4V_{DC}.

Note 2. Thermal resistance, junction-to-terminal, 5.0mm² copper pads to each terminal.

Note 3. Thermal resistance, junction-to-ambient, 5.0mm² copper pads to each terminal.

