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NTE585
Schottky Barrier Diode
DO–41 Type Package

Features:

- Schottky Barrier Chip
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 25A Peak
- Lower Power Loss, High Efficiency
- Ideally Suited for Use in High Frequency SMPS, Inverters ans As Free Wheeling Diodes

Maximum Ratings and Electrical Characteristics: (T_A = +25°C unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Maximum Peak Repetitive Reverse Current, V_{RRM} 40V
Maximum Recurrent Peak Reverse Voltage, V_{RWM} 40V
Maximum DC Blocking Voltage, V_R 40V
Maximum RMS Voltage, $V_{R(RMS)}$ 28V
Maximum Average Forward Rectified Current (T_L = +90°C, Note1), I_O 1.0A
Peak Forward Surge Current, I_{FSM}
(8.3ms single half sine–wave superimposed on rated load) 25A
Maximum Forward Voltage, V_{FM}
at 1.0A DC 0.6V
at 3.1A DC 0.9V
Maximum Peak Reverse Current at Rated DC Blocking Voltage, I_{RM}
T_A = +25°C 1.0mA
T_A = +100°C 10mA
Typical Junction Capacitance (Note 2), C_J 110pF
Typical Thermal Resistance, Junction–to–Ambient (Note 3), R_{thJA} . . . . . 50°C/W
Typical Thermal Resistance, Junction–to–Lead (Note 3), R_{thJL} . . . . . 15°C/W
Operating Junction Temperature Range T_J . . . . . –65° to +125°C
Storage Temperature Range T_{stg} . . . . . –65° to +150°C

Note 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
Note 2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
Note 3. Vertical PCB mounting with 9.5mn lead on 38 x 38mm copper pad.