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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 and As Free Wheeling Diodes

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ 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 ($T_L = +90^\circ\text{C}$, 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} $T_A = +25^\circ\text{C}$	1.0mA
$T_A = +100^\circ\text{C}$	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 9.5mm lead on 38 x 38mm copper pad.

