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## NTE637 Schottky Barrier Diode (Surface Mount)

**Absolute Maximum Ratings:** ( $T_a = +25^\circ\text{C}$ , Note 1, unless otherwise specified)

Repetitive Peak Reverse Voltage, $V_{RRM}$ .....	30V
Average Rectified Forward Current, $I_{F(AV)}$ .....	200mA
Non-Repetitive Peak Forward Surge Current (Pulse Width = 1.0s), $I_{FSM}$ .....	600mA
Power Dissipation, $P_D$ .....	290mW
Storage Temperature Range, $T_{STG}$ .....	$-55^\circ$ to $+150^\circ\text{C}$
Operating Junction Temperature, $T_J$ .....	$-55^\circ$ to $+150^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient, $R_{thJA}$ .....	$430^\circ\text{C/W}$

Note 1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Electrical Characteristics:** ( $T_c = +25^\circ\text{C}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	$V_R$	$I_R = 10\mu\text{A}$	30	-	-	V
Forward Voltage	$V_F$	$I_F = 0.1\text{mA}$	-	-	240	mV
		$I_F = 1\text{mA}$	-	-	320	mV
		$I_F = 10\text{mA}$	-	-	400	mV
		$I_F = 30\text{mA}$	-	-	500	mV
		$I_F = 100\text{mA}$	-	-	0.8	V
Reverse Leakage	$I_R$	$V_R = 25\text{V}$	-	-	2	$\mu\text{A}$
Total Capacitance	$C_T$	$V_R = 1\text{V}$ , $f = 1.0\text{MHz}$	-	-	10	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}$ , $I_{RR} = 1.0\text{mA}$ , $R_L = 100\Omega$	-	-	5.0	ns

