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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° to $+150^\circ\text{C}$
Operating Junction Temperature, T_J	-55° to $+150^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient, R_{thJA}	430°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	μA
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

