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## NTE633

### Silicon Rectifier Diode High Speed Switching SOD-323 Type Package

**Description:**

The NTE631 is a high-speed switching diode in a very small, rectangular SOD-323 type SMD package.

**Features:**

- Very Small Plastic SMD Package
- High Switching Speed: 4ns Max.
- Continuous Reverse Voltage: 100V Max.
- Repetitive Peak reverse Voltage: 100V Max.
- Repetitive Peak Forward Current: 500mA Max.

**Applications:**

- Surface Mount Fast Switching Diode

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

DC Reverse Voltage,  $V_R$  ..... 100V  
 Forward Current,  $I_F$  ..... 300mA  
 Power Dissipation,  $P_D$  ..... 200mW  
 Operating Junction Temperature Range,  $T_J$  .....  $-65^\circ$  to  $+150^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-65^\circ$  to  $+150^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	100	-	-	V
Forward Voltage	$V_F$	$I_F = 1.0\text{mA}$	0.62	-	0.715	V
		$I_F = 10\text{mA}$	-	-	0.855	V
		$I_F = 50\text{mA}$	-	-	1.0	V
		$I_F = 150\text{mA}$	-	-	1.25	V
Reverse Current	$I_R$	$V_R = 75\text{V}$	-	-	1.0	$\mu\text{A}$
		$V_R = 25\text{V}$	-	-	0.03	$\mu\text{A}$
Capacitance Between Terminals	$C_T$	$f = 1\text{MHz}, V_R = 0$	-	-	1.5	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}, R_L = 100\Omega$	-	-	4	ns

Rev. 3-22



