



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE594 Silicon Diode, Bandswitch

Description:

The NTE594 is a silicon band switching diode in an SOT-23 type surface mount package intended for thick and thin-film circuits.

Absolute Maximum Ratings:

Continuous Reverse Voltage, V_R	35V
DC Forward Current, I_F	100mA
Total Power Dissipation ($T_A \leq +25^\circ\text{C}$), P_{tot}	200mW
Operating Junction Temperature, T_J	+125°C
Storage Temperature Range, T_{stg}	-55° to +125°C
Thermal Resistance, Junction-to-Ambient, R_{thJA}	430K/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	-	1.2	V
Reverse Current	I_R	$V_R = 20\text{V}$	-	-	100	nA
		$V_R = 20\text{V}, T_J = 60^\circ\text{C}$	-	-	1	μA
Series Resistance	r_D	$I_F = 5\text{mA}$	-	0.5	0.7	Ω
Diode Capacitance	C_d	$V_R = 20\text{V}, f = 1\text{MHz}$	-	0.8	1.0	pF

