ELECTRONICS, INC.
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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 ($T_A \le +25°C$), 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°C unless otherwise specified)

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