ELECTRONICS, INC.
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NTE590 & NTE591
Dual Switching Diode

Features:
- Available in Common Cathode (NTE590) and Common Anode (NTE591)
- Low Capacitance
- Fast Recovery Time
- Low Leakage
- High Conductance

Absolute Maximum Ratings:

Non−Repetitive Peak Reverse Voltage, V_{RM} 75V
DC Blocking Voltage, V_R 75V
Peak Forward Surge Current, I_{FSM}
  Total Device 6A
  Per Diode Leg 4A
Continuous Forward Current, I_{FM}
  Total Device 450mA
  Per Diode Leg 300mA
Average Forward Rectified Current, I_O
  Total Device 200mA
  Per Diode eg 100mA
Power Dissipation (Total Device, T_A = +25°C), P_T 250mW
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . −55° to +150°C

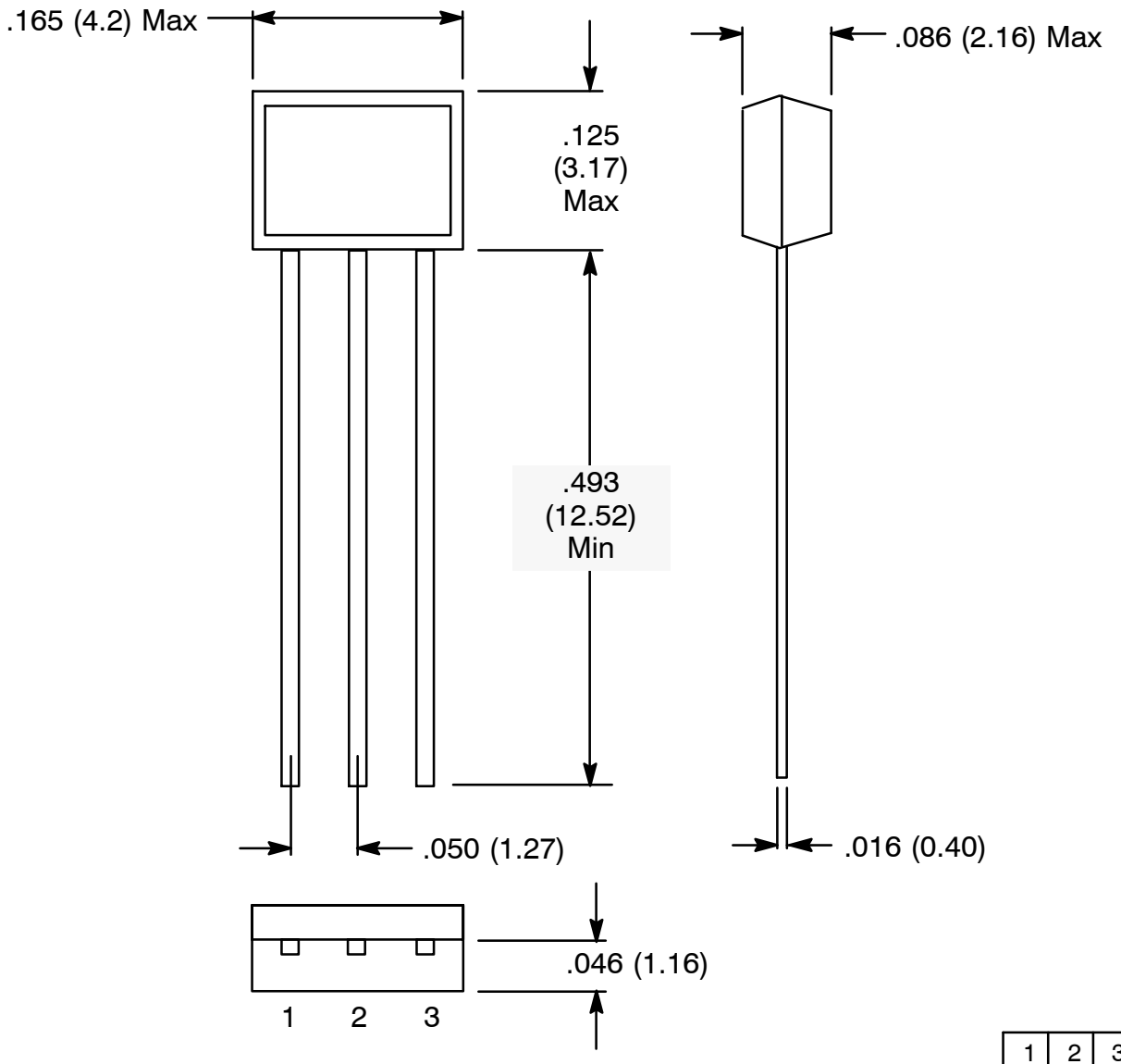
Note 1. **NTE591** is a **discontinued** device and **no longer available**.

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Forward Voltage NTE590	V_F	I_F = 10mA	–	0.67	1.0	V
		I_F = 50mA	–	0.75	1.1	V
		I_F = 100mA	–	0.85	1.2	V
NTE591		I_F = 10mA	–	0.72	1.0	V
		I_F = 50mA	–	0.88	1.1	V
		I_F = 100mA	–	1.0	1.2	V
Maximum DC Reverse Current	I_R	V_R = 50V	–	–	0.1	μA

Electrical Characteristics (Cont'd): (T_A = +25°C unless otherwise specified))

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Terminal Capacitance NTE590	C_t	V_R = 0, f = 1MHz	–	1.1	4.0	pF
NTE591			–	2.5	3.5	pF
Reverse Recovery Time NTE590	t_{rr}	I_F = 10mA, V_R = 6V, R_L = 100Ω	–	–	3.0	ns
NTE591			–	–	4.0	ns



	1	2	3
NTE590	A	K	A
NTE591	K	A	K