

**NTE1680**  
**Integrated Circuit**  
**High Speed, 6 Diode Array, Common Anode**

**Description:**

The NTE1680 is a common anode monolithic array of high speed switching diodes in a 7-Lead SIP type package.

**Features:**

- High Speed Switching Time:  $t_{rr} = 4.0\text{ns}$  Typ.
- Low Capacitance:  $C_t = 5.0\text{pf}$  TYP.
- Small Size Enables High Density Mounting

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

Peak Reverse Voltage, $V_{RM}$ .....	75V
Reverse Voltage, $V_R$ .....	50V
Peak Forward Surge Current (Per Unit), $I_{F\text{surge}}$ .....	1A
Peak Forward Current (1 $\mu\text{s}$ , Per Unit), $I_{FM}$ .....	200mA
Average Rectified Current (Per Unit), $I_O$ .....	100mA
Power Dissipation (Per Package), $P_D$ .....	300mW
Operating Junction Temperature, $T_J$ .....	+125 $^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	-55 $^\circ$ to + 125 $^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage Drop	$V_F$	$I_F = 30\text{mA}$	–	0.8	1.0	V
Reverse Current	$I_R$	$V_R = 30\text{V}$	–	0.005	0.1	$\mu\text{A}$
Terminal Capacitance (Per Unit)	$C_t$	$V_R = 0, f = 1.0\text{MHz}$	–	5.0	8.0	pF
Reverse Recovery Time	$t_{rr}$		–	4.0	8.0	ns

**Pin Connection Diagram**  
(Front View)

