



**ELECTRONICS, INC.**  
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## NTE1828 Integrated Circuit Quad Transistor Array, 10kΩ

**Features:**

- 4 Circuits
- Output Current:  $I_C = 50\text{mA}$
- Breakdown Voltage:  $V_{CEO} = 24\text{V}$
- Built-In Base Current Limiting Resistor

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

Collector–Base Voltage, $V_{CBO}$ .....	50V
Collector–Emitter Voltage, $V_{CEO}$ .....	24V
Collector Substrate Voltage, $V_{CIO}$ .....	50V
Collector Current, $I_C$ .....	50mA
Input Voltage, $V_1$ .....	–0.5V to 50V
Collector Power Dissipation (Per Transistor), $P_C$ .....	250mW
Power Dissipation, $P_D$ .....	1000mW
Operating Ambient Temperature Range, $T_{opr}$ .....	–30° to +75°C
Storage Temperature Range, $T_{stg}$ .....	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Voltage	$V_{CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	50	–	–	V
Collector–Emitter Voltage	$V_{CEO}$	$I_C = 1\text{mA}, I_B = 0$	24	–	–	V
Collector Leakage Current	$I_{CEO}$	$V_{CE} = 10\text{V}, R_{BE} = \infty$	–	–	1	$\mu\text{A}$
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5\text{mA}, I_1 = 0.6\text{mA}$	–	0.1	0.2	V
		$I_C = 25\text{mA}, I_1 = 2.6\text{mA}$	–	0.3	0.4	V
Input Voltage	$V_1$	$V_{CE} = 300\text{mV}, I_C = 5\text{mA}$	–	2.2	3.3	V
		$V_{CE} = 500\text{mV}, I_C = 25\text{mA}$	–	5.6	10	V
Input Current	$I_1$	$I_C = 5\text{mA}, V_1 = 5\text{V}$	–	0.45	0.60	mA
		$I_C = 25\text{mA}, V_1 = 15\text{V}$	–	1.6	2.0	mA

**Pin Connection Diagram**  
(Front View)

