



**ELECTRONICS, INC.**  
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## NTE382 (NPN) & NTE383 (PNP) Silicon Complementary Transistors Audio Frequency Driver

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

Collector–Base Voltage, $V_{CBO}$ .....	120V
Collector–Emitter Voltage, $V_{CEO}$ .....	100V
Emitter–Base Voltage, $V_{EBO}$ .....	5V
Collector Current, $I_C$	
Continuous .....	1A
Peak .....	2A
Collector Power Dissipation, $P_C$ .....	900mW
Operating Junction Temperature, $T_J$ .....	+150°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 Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	120	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$	100	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	5	–	–	V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 100\text{V}, I_E = 0$	–	–	10	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 150\text{mA}$	160	–	320	
		$V_{CE} = 5\text{V}, I_C = 500\text{mA}$	30	–	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	–	–	1.0	V
Base–Emitter Voltage	$V_{BE}$	$V_{CE} = 5\text{V}, I_C = 150\text{mA}$	–	–	1.5	V
Current Gain–Bandwidth Product	$f_T$	$V_{CE} = 5\text{V}, I_C = 150\text{mA}$	–	140	–	MHz
Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	–	20	–	pF

