



ELECTRONICS, INC.  
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## BC337

### Silicon NPN Transistor Audio Amplifier, Switch

#### **Features:**

- Suitable for AF-Driver Stages and Low Power Output Stages

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

Collector-Emitter Voltage, $V_{CES}$ .....	50V
Collector-Emitter Voltage, $V_{CEO}$ .....	45V
Emitter-Base Voltage, $V_{EBO}$ .....	5V
Continuous Collector Current, $I_C$ .....	800mA
Collector Power Dissipation, $P_D$ .....	625mW
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-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B = 0$	45	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C = 0.1\text{mA}, V_{BE} = 0$	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 0.1\text{mA}, I_C = 0$	5	-	-	V
Collector Cutoff Current	$I_{CES}$	$V_{CE} = 45\text{V}, I_B = 0$	-	2	100	nA
DC Current Gain	$h_{FE}$	$V_{CE} = 1\text{V}, I_C = 100\text{mA}$	100	-	630	
		$V_{CE} = 1\text{V}, I_C = 300\text{mA}$	60	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	-	-	0.7	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = 1\text{V}, I_C = 300\text{mA}$	-	-	1.2	V
Current Gain-Bandwidth Product	$f_T$	$I_C = 10\text{mA}, V_{CE} = 5\text{V}, f = 50\text{MHz}$	-	100	-	MHz
Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	-	12	-	pF

