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BC558

Silicon PNP 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-Base Voltage, V_{CBO}	30V
Collector-Emitter Voltage, V_{CEO}	30V
Emitter-Base Voltage, V_{EBO}	5V
Continuous Collector Current, I_C	100mA
Collector Power Dissipation, P_D	500mW
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-65° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 30V, I_E = 0$	-	-	15	nA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 2mA$	110	-	800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 0.5mA$	-	90	300	mV
		$I_C = 100mA, I_B = 5mA$	-	250	650	mV
Collector-Base Saturation Voltage	$V_{CB(sat)}$	$I_C = 10mA, I_B = 0.5mA$	-	700	-	mV
		$I_C = 100mA, I_B = 5mA$	-	900	-	mV
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = 5V, I_C = 2mA$	600	660	750	mV
		$V_{CE} = 5V, I_C = 10mA$	-	-	800	mV
Current Gain-Bandwidth Product	f_T	$I_C = 10mA, V_{CE} = 5V, f = 10MHz$	-	150	-	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	-	-	6	pF
Noise Figure	NF	$V_{CE} = 5V, I_C = 200\mu A, f = 1kHz, R_G = 2k\Omega$	-	2	10	dB

