

Transistors

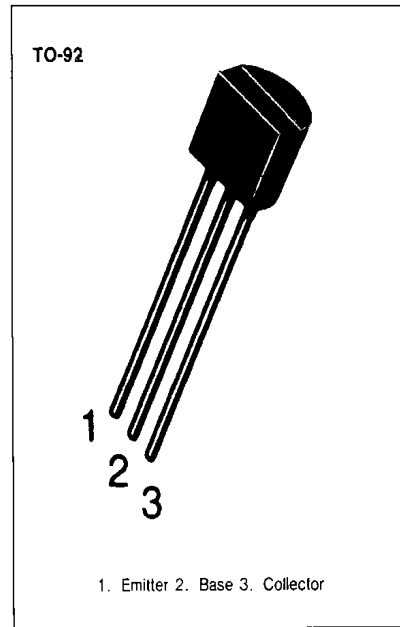
2SB564A

AUDIO FREQUENCY POWER AMPLIFIER

- Collector Current $I_C = -1A$
- Collector Dissipation $P_C = 800mW$

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-1.0	A
Collector Dissipation	P_C	800	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ C$



ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

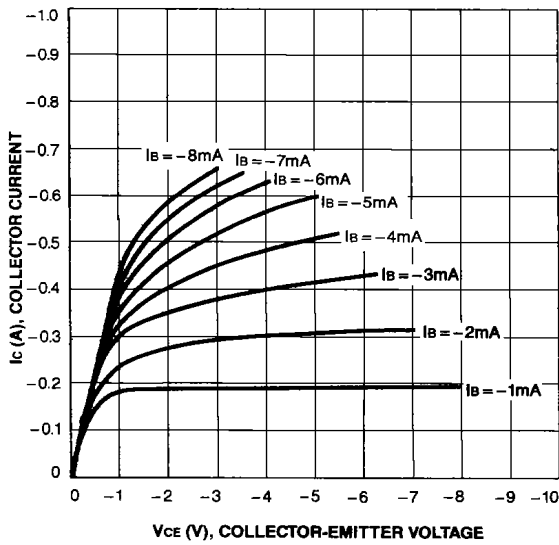
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -10mA, I_B = 0$	-25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -1V, I_C = -100mA$	70		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -0.1A$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -1A, I_B = -0.1A$			-1.2	V
Current-Gain-Bandwidth Product	f_T	$V_{CE} = -6V, I_C = -10mA$		110		MHz
Output Capacitance	Cob	$V_{CB} = -6V, f = 1 MHz, I_E = 0$		18		pF

h_{FE} CLASSIFICATION

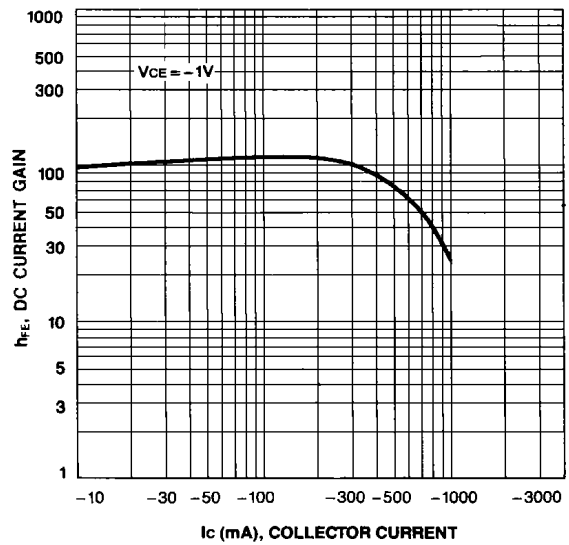
Classification	O	Y	G
h_{FE}	70-140	120-240	200-400



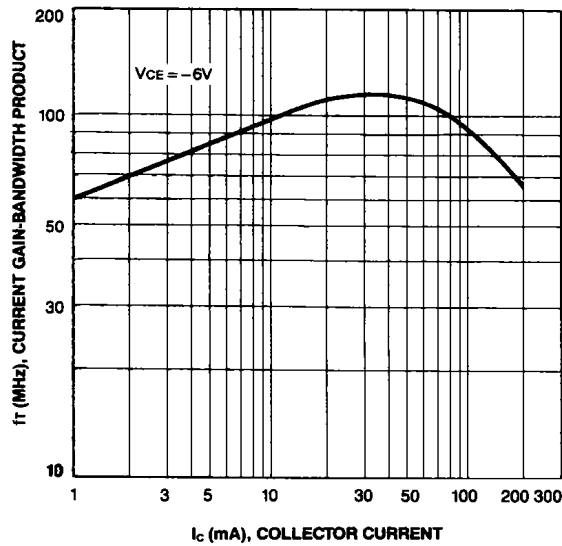
STATIC CHARACTERISTIC



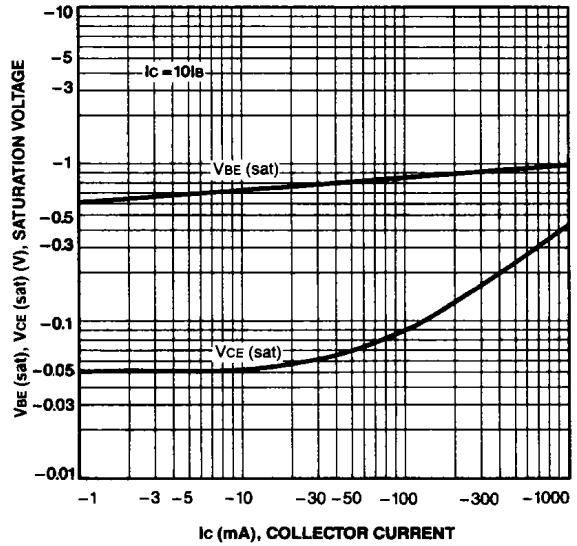
DC CURRENT GAIN



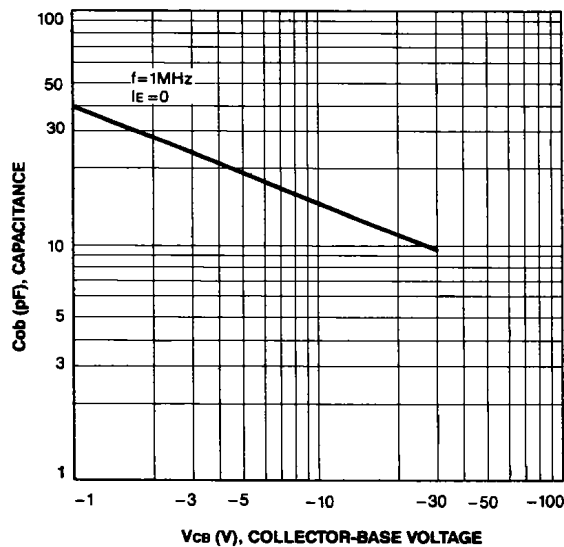
CURRENT GAIN-BANDWIDTH PRODUCT



**BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE**



COLLECTOR OUTPUT CAPACITANCE



SAFE OPERATING AREA

