

Transistors

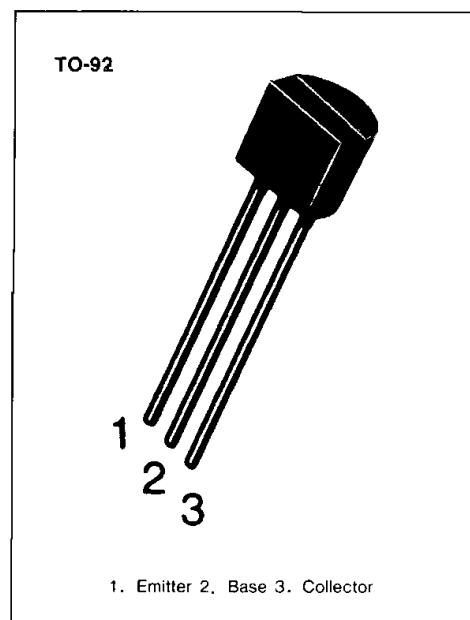
C8050

2W OUTPUT AMPLIFIER OF PORTABLE RADIOS IN CLASS B PUSH-PULL OPERATION.

- Complimentary to SS8550
- Collector Current $I_C = 1.5A$
- Collector Dissipation $P_C = 2W$ ($T_C = 25^\circ C$)

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1.5	A
Collector Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	$-65 \sim 150$	$^\circ C$



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

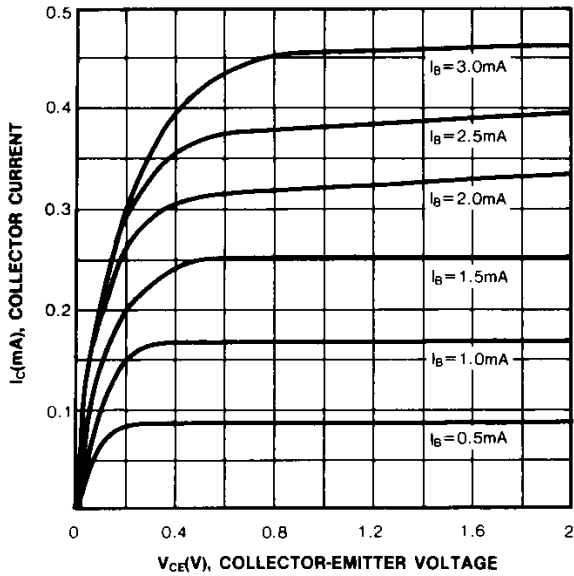
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 2mA, I_B = 0$	25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	6			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 35V, I_E = 0$			100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 6V, I_C = 0$			100	nA
DC Current Gain	h_{FE1}	$V_{CE} = 1V, I_C = 5mA$	45	135		
	h_{FE2}	$V_{CE} = 1V, I_C = 100mA$	85	160	300	
	h_{FE3}	$V_{CE} = 1V, I_C = 800mA$	40	110		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 800mA, I_B = 80mA$		0.28	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 800mA, I_B = 80mA$		0.98	1.2	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 1V, I_C = 10mA$		0.66	1	V
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0$ $f = 1MHz$		9.0		pF
Current Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 50mA$	100	190		MHz

h_{FE} (2) CLASSIFICATION

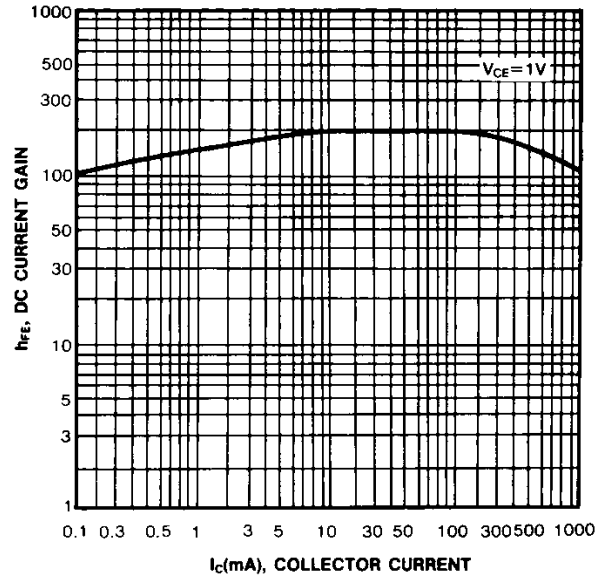
Classification	B	C	D
h_{FE} (2)	85-160	120-200	160-300



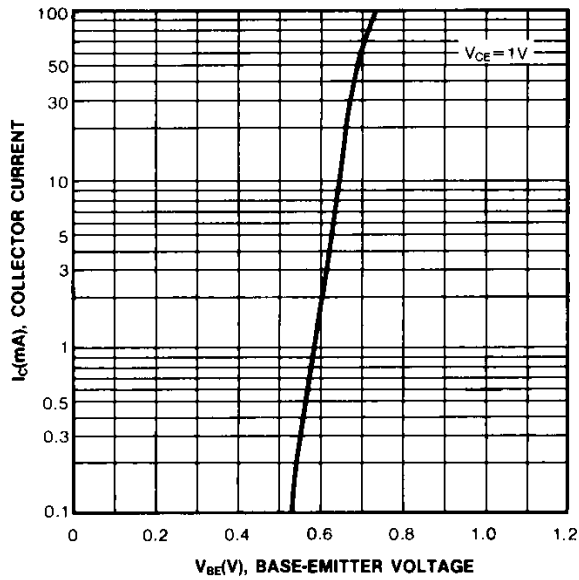
STATIC CHARACTERISTIC



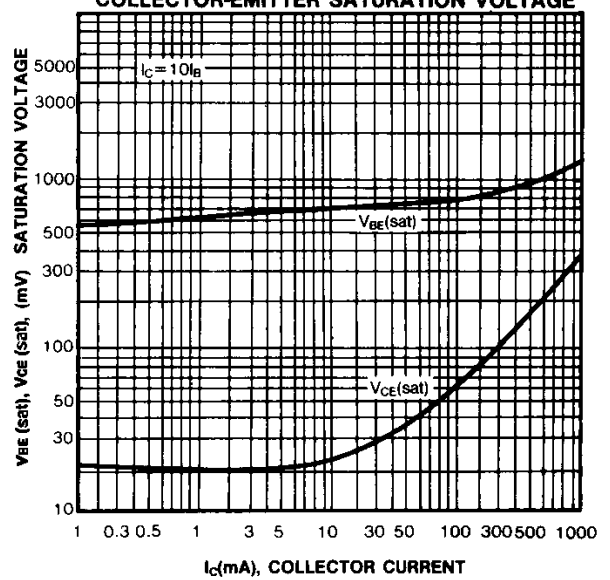
DC CURRENT GAIN



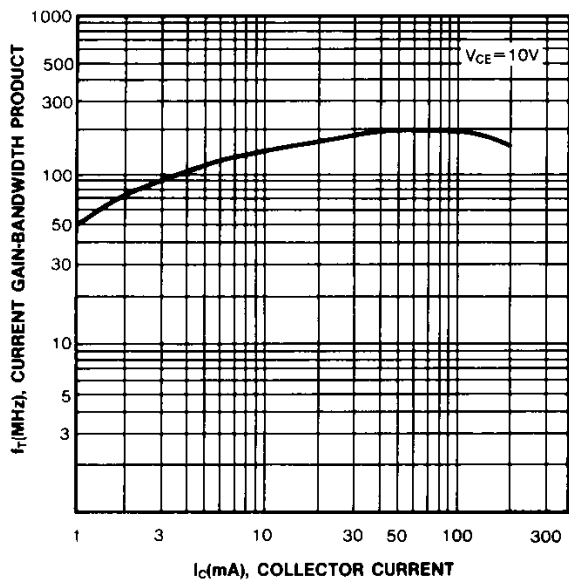
BASE-EMITTER ON VOLTAGE



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



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE

