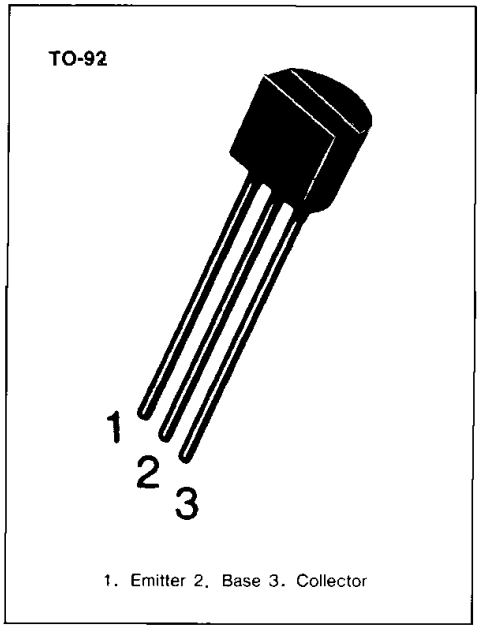
Transistors
C8050

USHA (INDIA) LTD

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°C)**



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°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	Tj	150	°C
Storage Temperature	Tstg	−65~150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C)

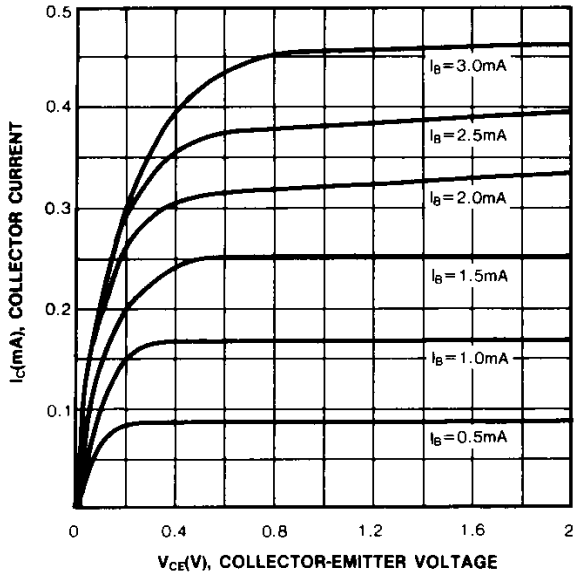
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100μA, I_E=0	40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=2mA, I_B=0	25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=100μA, I_C=0	6			V
Collector Cutoff Current	I_{CBO}	V_{CB}=35V, I_E=0			100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=6V, I_C=0			100	nA
DC Current Gain	$h_{FE}1$	V_{CE}=1V, I_C=5mA	45	135		
	$h_{FE}2$	V_{CE}=1V, I_C=100mA	85	160	300	
	$h_{FE}3$	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	Cob	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

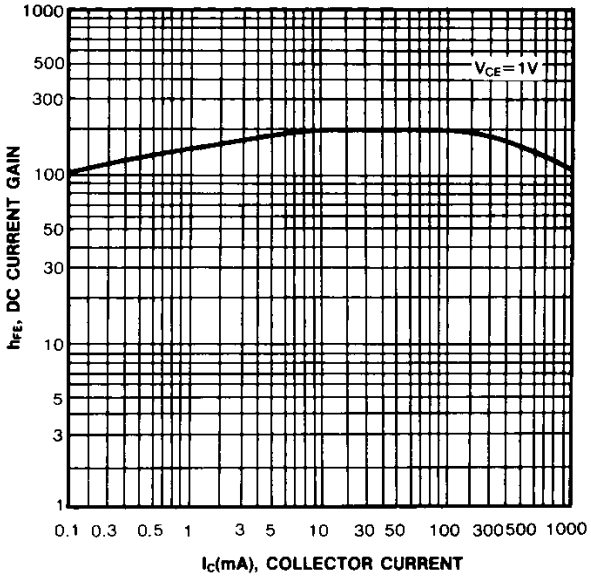
Classification	B	C	D
h_{FE} (2)	85-160	120-200	160-300

ISO 14001 CERTIFIED
AN ISO 9002 COMPANY

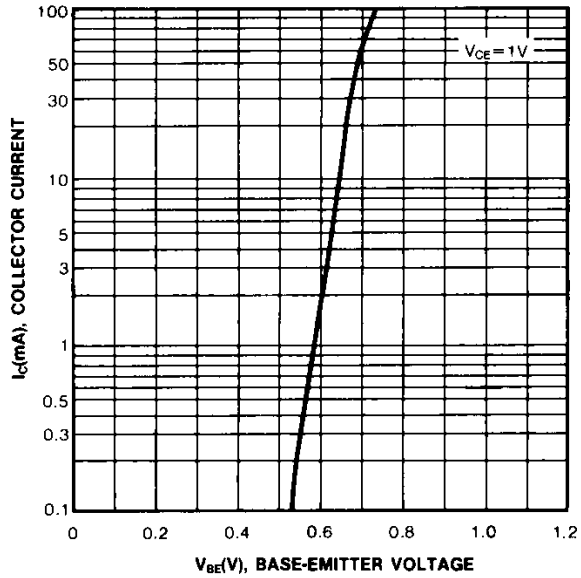
STATIC CHARACTERISTIC



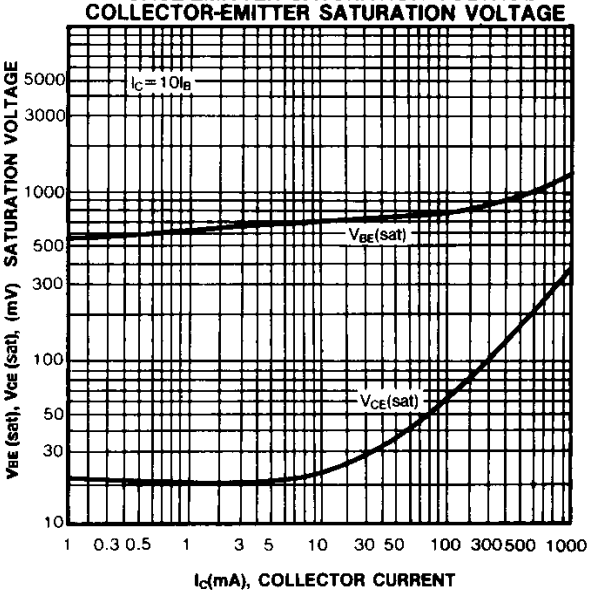
DC CURRENT GAIN



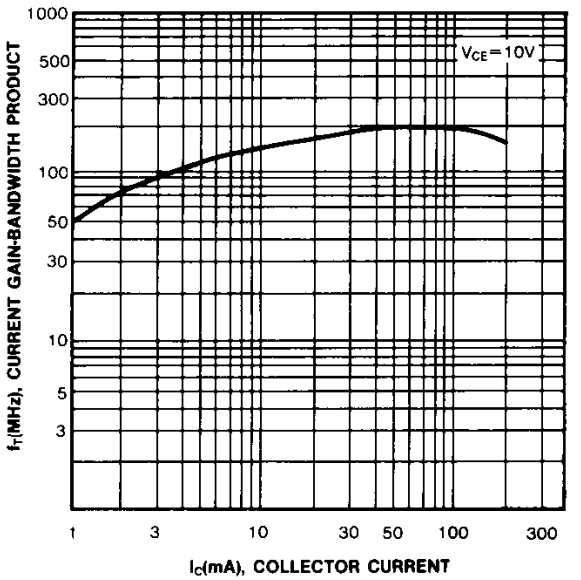
BASE-EMITTER ON VOLTAGE



BASE-EMITTER SATURATION VOLTAGE COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE