

Transistors

2SC9013

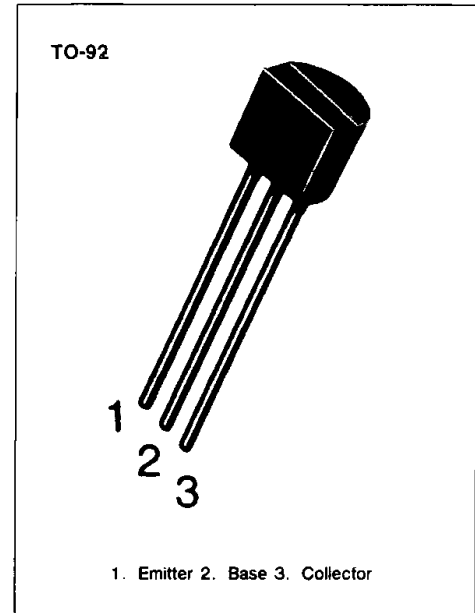


1W OUTPUT AMPLIFIER OF POTABLE RADIOS IN CLASS B PUSH-PULL OPERATION.

- High total power dissipation. (PT=625mW)
- High Collector Current. (I_c = 500mA)
- Complementary to SS9012
- Excellent h_{FE} linearity

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	40	V
Collector-Emitter Voltage	V _{CEO}	20	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _c	500	mA
Collector Dissipation	P _c	625	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (T_a = 25°C)

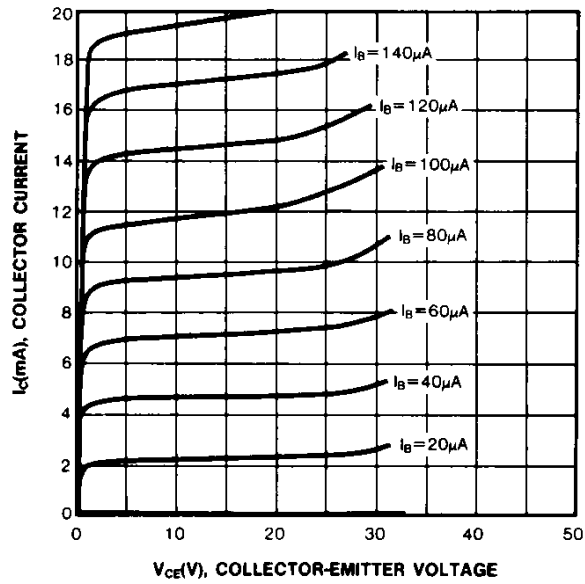
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _c = 100μA, I _E = 0	40			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _c = 1mA, I _B = 0	20			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = 100μA, I _C = 0	5			V
Collector Cutoff Current	I _{CBO}	V _{CB} = 25V, I _E = 0			100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 3V, I _C = 0			100	nA
DC Current Gain	h _{FE1}	V _{CE} = 1V, I _C = 50mA	64	120	202	
	h _{FE2}	V _{CE} = 1V, I _C = 500mA	40	120		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA		0.16	0.6	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA		0.91	1.2	V
Base-Emitter On Voltage	V _{BE(on)}	V _{CE} = 1V, I _C = 10mA	0.6	0.67	0.7	V

h_{FE} (1) CLASSIFICATION

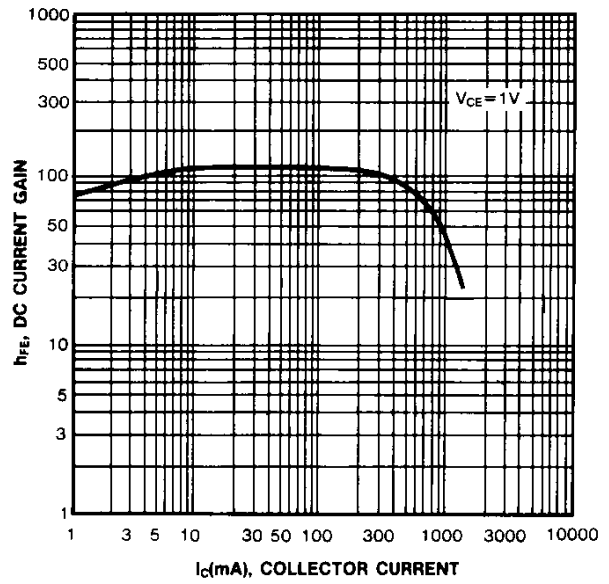
Classification	D	E	F	G	H
h _{FE} (1)	64-91	78-112	96-135	112-166	144-202



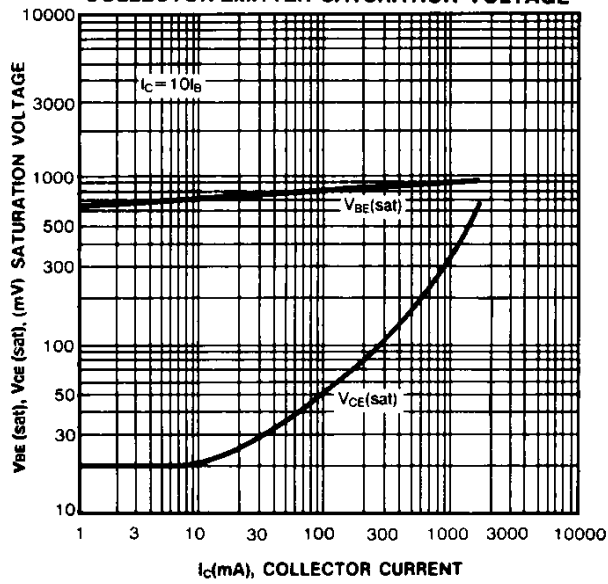
STATIC CHARACTERISTIC



DC CURRENT GAIN



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



CURRENT GAIN-BANDWIDTH PRODUCT

