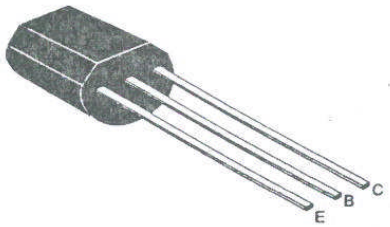
TRANSISTOR 三極管(SOUTH KOREA SEMICONDUCTOR)

SK9012



TO-92

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 SK 9013
- Excellent h_{FE} linearity.

CLASSIFICATION h_{FE} (1)

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

ABSOLUTE MAXIMUM RATINGS (Ta=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	Tj	150	°C
Storage Temperature	Tstg	–55~150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	–40			V	I_C=–100μA, I_E=0
Collector-Emitter Breakdown Voltage	BV_{CEO}	–20			V	I_C=–1mA, I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	–5			V	I_E=–100μA, I_C=0
Collector Cutoff Current	I_{CBO}			–100	nA	V_{CB}=–25V, I_E=0
Emitter Cutoff Current	I_{EBO}			–100	nA	V_{EB}=–3V, I_C=0
DC Current Gain	$h_{FE}1$	64	120	202		V_{CE}=–1V, I_C=–50mA
	$h_{FE}2$	40	90			V_{CE}=–1V, I_C=–500mA
Collector-Emitter Saturation Voltage	V_{CE} (sat)		–0.18	–0.6	V	I_C=–500mA, I_B=–50mA
Base-Emitter Saturation Voltage	V_{BE} (sat)		–0.95	–1.2	V	I_C=–500mA, I_B=–50mA
Base-Emitter On Voltage	V_{BE} (on)	–0.6	–0.67	–0.7	V	V_{CE}=–1V, I_C=–10mA

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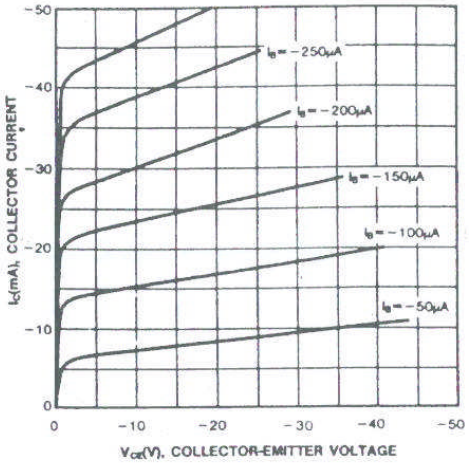
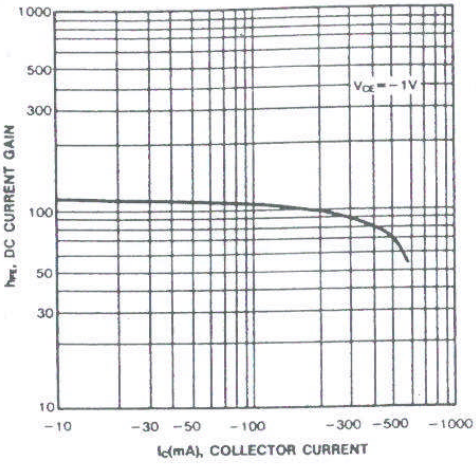
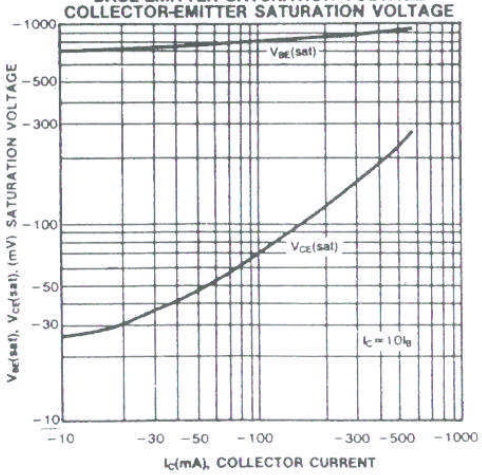
STATIC CHARACTERISTIC



DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT