

DESCRIPTION

2SA1944 is a silicon PNP epitaxial type transistor. It is designed with high voltage, high collector current and high hFE.

Complementary with 2SC5209.

FEATURE

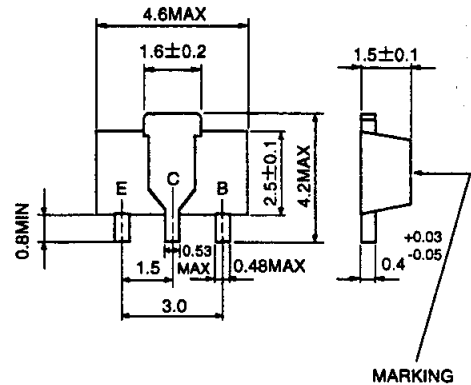
- High voltage $V_{CE0} = -50V$
- Low collector to emitter saturation voltage
 $V_{CE(sat)} = -0.2V$ typ (@ $I_C = -500mA, I_B = -10mA$)
- High hFE $h_{FE} = 400$ to 800
- Small package for mounting

APPLICATION

Audio machine, VCR, relay drive of other electronic machine, power supply.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR EIAJ : SC-62
B : BASE JEDEC : -

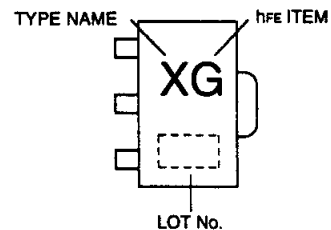
Note)

The dimension without tolerance represent central value.

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

Symbol	Parameter	Ratings	Unit
V_{CB0}	Collector to Base voltage	-50	V
V_{EB0}	Emitter to Base voltage	-6	V
V_{CE0}	Collector to Emitter voltage	-50	V
I_{CM}	Peak collector current	-2	A
I_C	Collector current	-1	A
P_C	Collector dissipation ($T_a = 25^\circ C$)	500	mW
T_j	Junction temperature	+150	$^\circ C$
T_{stg}	Storage temperature	-55 to +150	$^\circ C$

MARKING



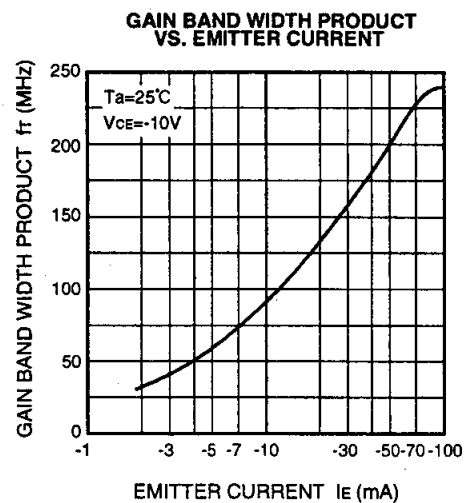
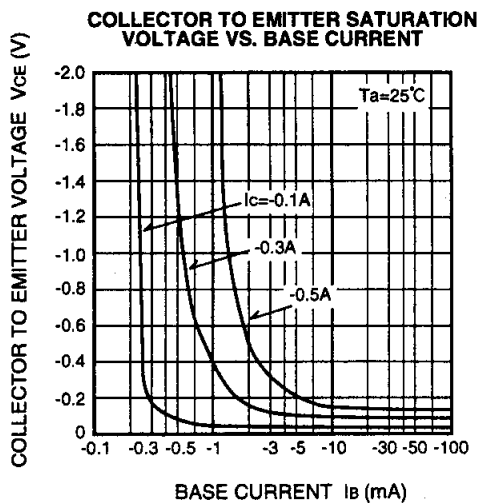
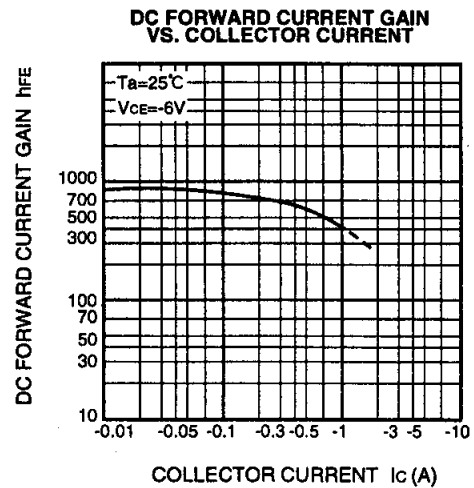
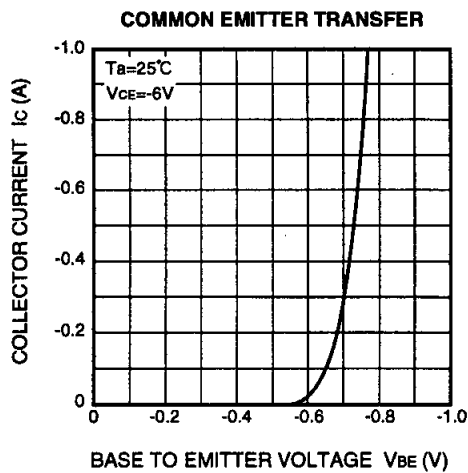
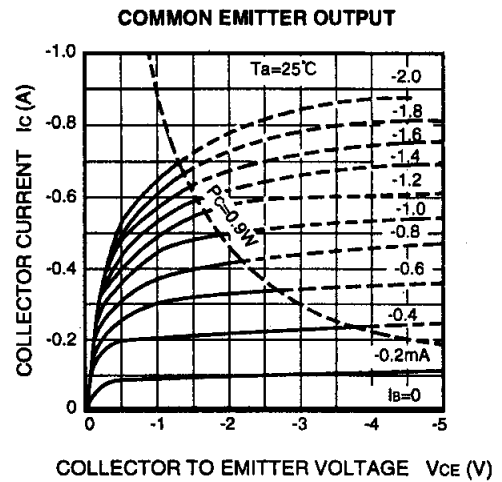
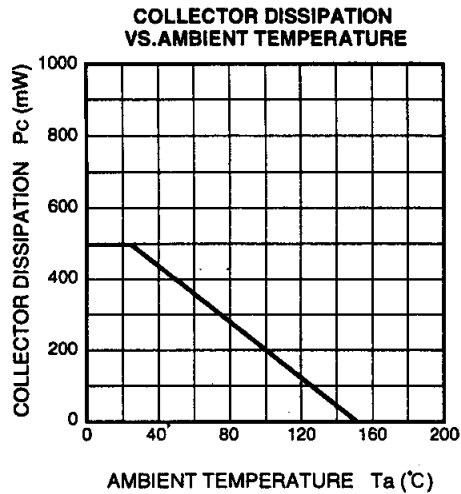
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

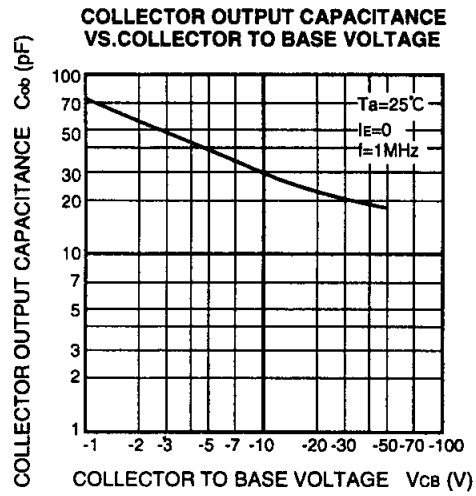
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -10 \mu A, I_E = 0$	-50			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10 \mu A, I_C = 0$	-6			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-50			V
I_{CBO}	Collector cut off current	$V_{CB} = -40V, I_E = 0$			-0.1	μA
I_{EBO}	Emitter cut off current	$V_{EB} = -2V, I_C = 0$			-0.1	μA
$h_{FE} *$	DC forward current gain	$V_{CE} = -6V, I_C = -100mA$	400		800	—
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -500mA, I_B = -10mA$		-0.2	-0.5	V
f_T	Gain band width product	$V_{CE} = -10V, I_E = -10mA$		90		MHz
C_{ob}	Collector output capacitance	$V_{CB} = -10V, I_E = 0, f = 1MHz$		30		pF

* : It shows hFE classification in right table.

Marking	XG
hFE	400 to 800

TYPICAL CHARACTERISTICS







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