

## DESCRIPTION

2SA1944 is a silicon PNP epitaxial type transistor. It is designed with high voltage, high collector current and high  $h_{FE}$ .

Complementary with 2SC5209.

## FEATURE

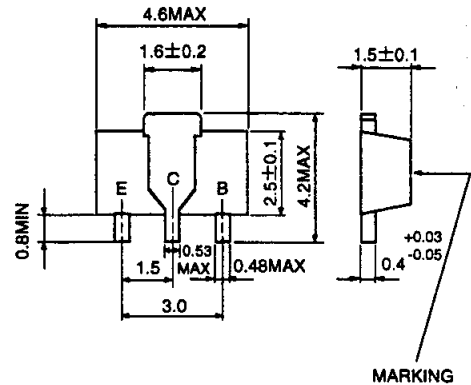
- High voltage  $V_{CE0} = -50V$
- Low collector to emitter saturation voltage  
 $V_{CE(sat)} = -0.2V$  typ (@  $I_C = -500mA, I_B = -10mA$ )
- High  $h_{FE}$   $h_{FE} = 400$  to  $800$
- Small package for mounting

## 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 : -

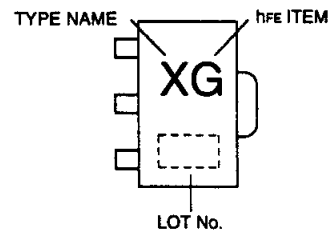
Note)

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



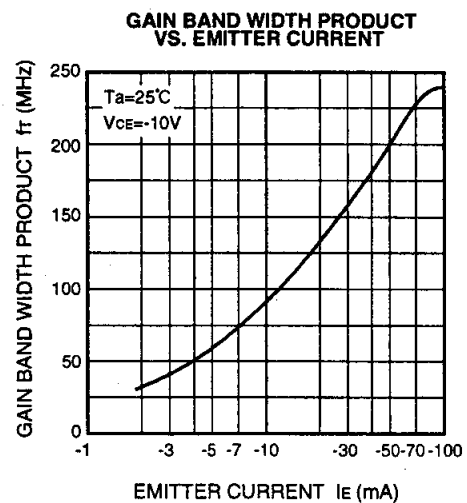
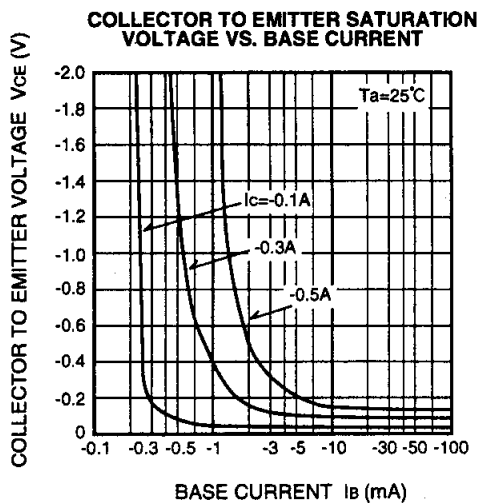
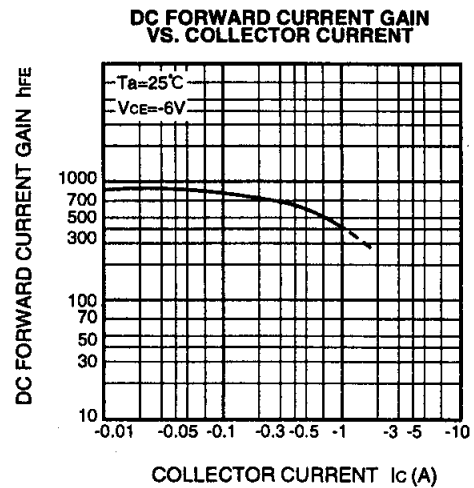
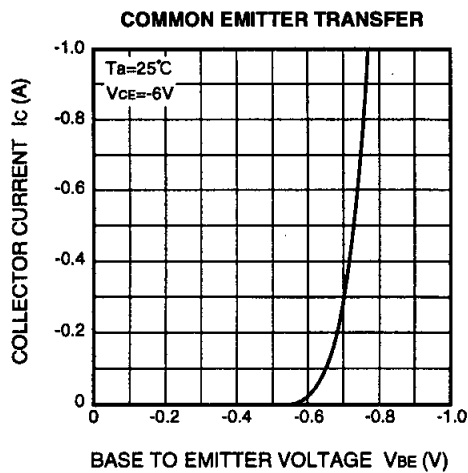
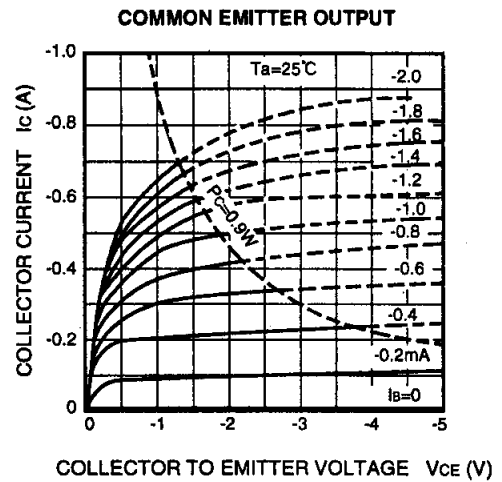
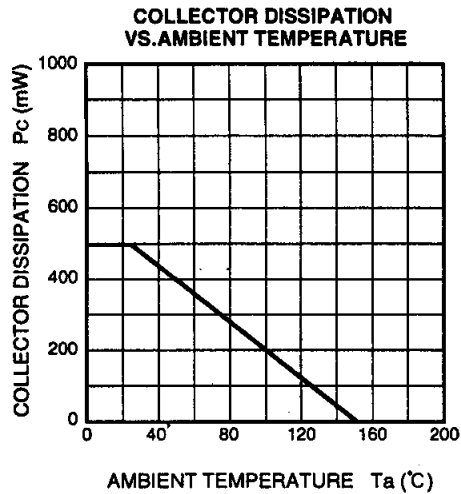
## ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

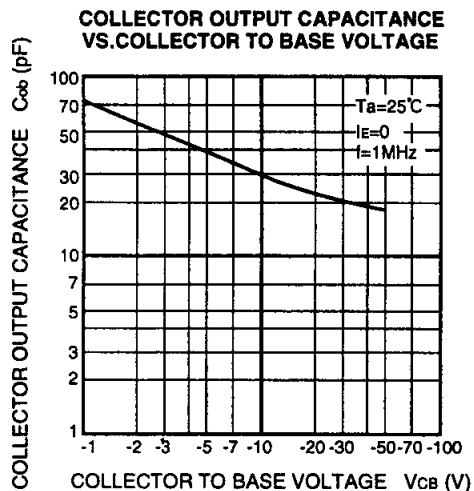
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -10 \mu A, I_E = 0$	-50			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10 \mu A, I_C = 0$	-6			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-50			V
$I_{CBO}$	Collector cut off current	$V_{CB} = -40V, I_E = 0$			-0.1	$\mu A$
$I_{EBO}$	Emitter cut off current	$V_{EB} = -2V, I_C = 0$			-0.1	$\mu A$
$h_{FE} *$	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  $h_{FE}$  classification in right table.

Marking	XG
$h_{FE}$	400 to 800

TYPICAL CHARACTERISTICS







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