

<SMALL-SIGNAL TRANSISTOR>

2SA1944

FOR RELAY DRIVE POWER SUPPLY APPLICATION
SILICON PNP EPITAXIAL TYPE

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

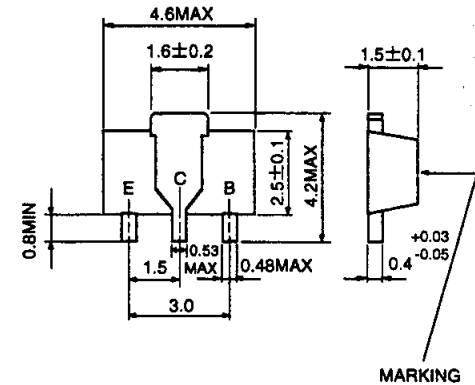
- High voltage $V_{CE0} = -50V$
- Low collector to emitter saturation voltage
 $V_{CE(sat)} = -0.2V$ typ (@ $I_C = -500mA, I_B = -10mA$)
- High hFE $h_{FE} = 400$ to 800
- Small package for mounting

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

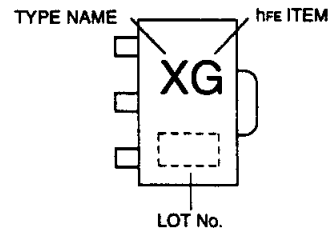
- E : EMITTER
 - C : COLLECTOR
 - B : BASE
- EIAJ : SC-62
JEDEC : -

Note)
The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°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(Ta=25°C)	500	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55 to +150	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

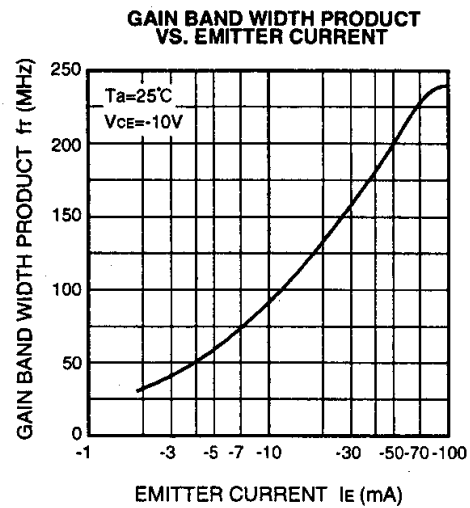
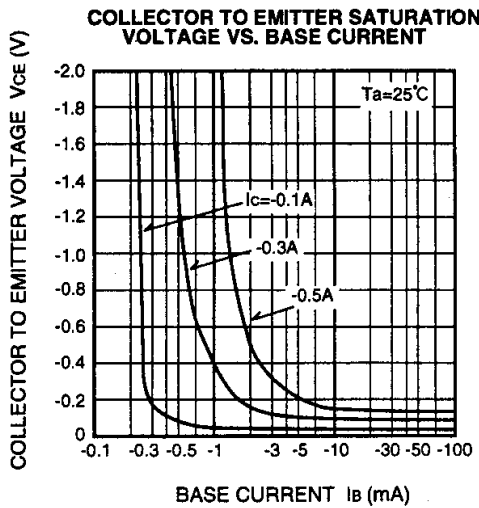
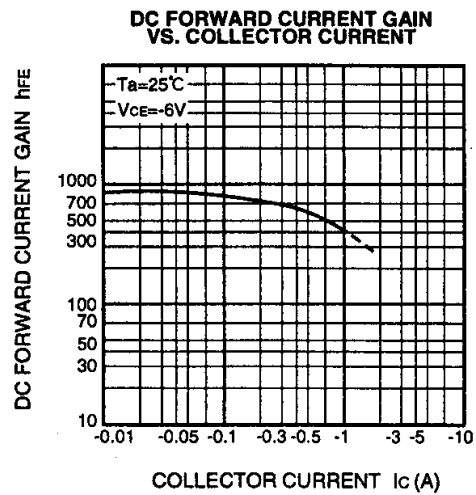
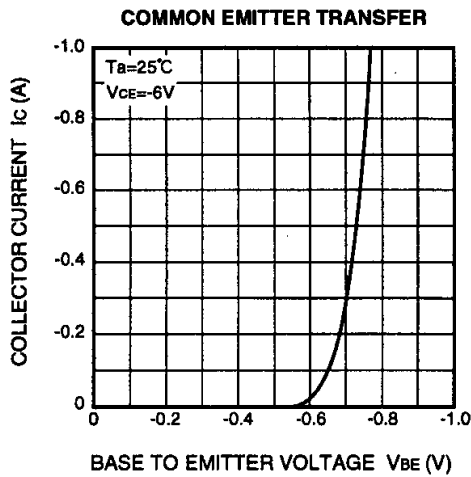
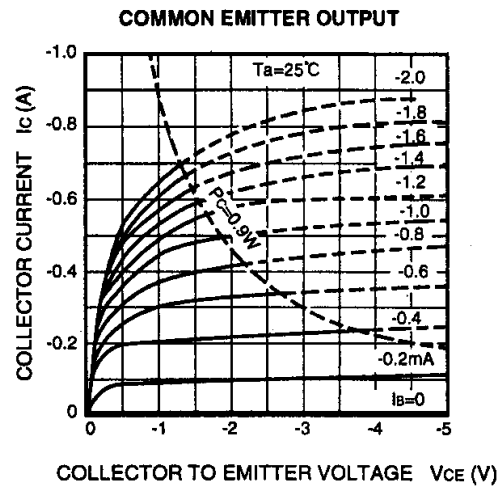
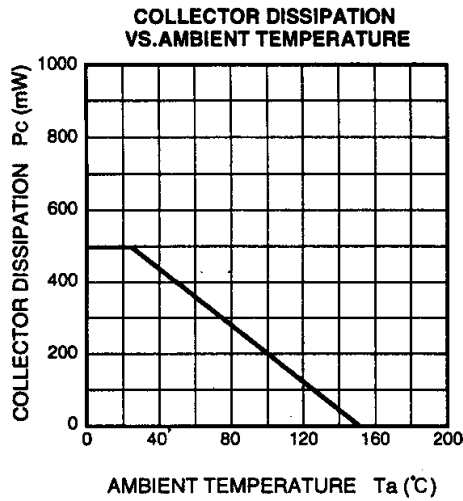
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CBO}	C to B break down voltage	I _C =-10 μA, I _E =0	-50			V
V _{(BR)EBO}	E to B break down voltage	I _E =-10 μA, I _C =0	-6			V
V _{(BR)CEO}	C to E break down voltage	I _C =-1mA, R _{BE} =∞	-50			V
I _{CBO}	Collector cut off current	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

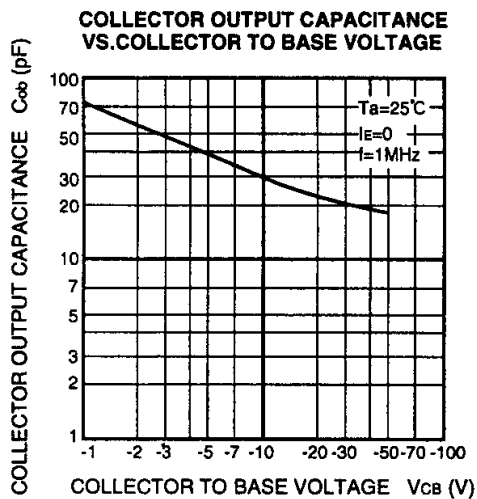
* : It shows hFE classification in right table.

Marking	XG
hFE	400 to 800

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TYPICAL CHARACTERISTICS





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