SJT688A PNP SILICON TRANSISTOR

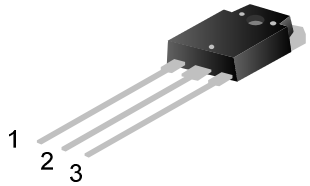
DESCRIPTIONS

SJT688APPN is PNP silicon transistor fabricated with Silan planar transistor technology, The advanced technology of multilayer epitaxy, ultra-low density of crystal defects, polyimide passivation, and thin chip of less than 200 microns makes low thermal resistance, large power dissipation and good reliability of SJT688APPN. Optimized die structure design and package design promote secondary breakdown resistance of the device.

This product is mainly used for output power level of audio power amplifier in car stereo audio, has the characteristics of wide linear range and low distortion.

The package available is TO-3P.

Complementary NPN transistor: SJT718ANPN.



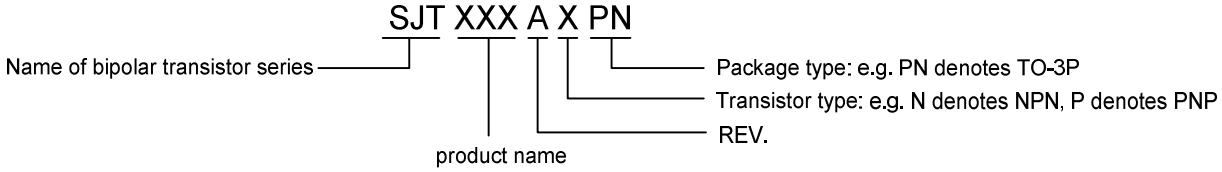
TO-3P

1. Base
2. Collector (Heat sink)
3. Emitter

FEATURES

- High breakdown voltage margin
- Very low leakage current
- High output power: 80W
- High secondary breakdown tolerance and reliability

NOMENCLATURE



ORDERING INFORMATION

Part No.	Package	Marking	Material	Packing
SJT688APPN	TO-3P	688A	Pb free	Tube

ABSOLUTE MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Characteristics	Symbol	Rating		Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	-120	I_C=5mA, I_B=0	V
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	I_E=1mA, I_C=0	V
Collector-Base Breakdown Voltage	BV_{CBO}	-120	I_C=1mA, I_E=0	V
Collector Current	I_C	-10		A
Base Current	I_B	-1		A
Operating Junction Temperature Range	T_J	-55~+150		°C

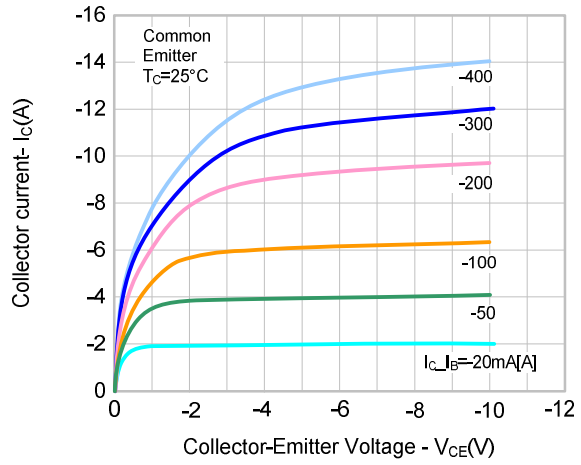
Characteristics	Symbol	Rating	Unit
Storage Temperature Range	T_{stg}	-55~+150	°C
Collector power dissipation (T_c=25°C)	P_C	80	W

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise noted)

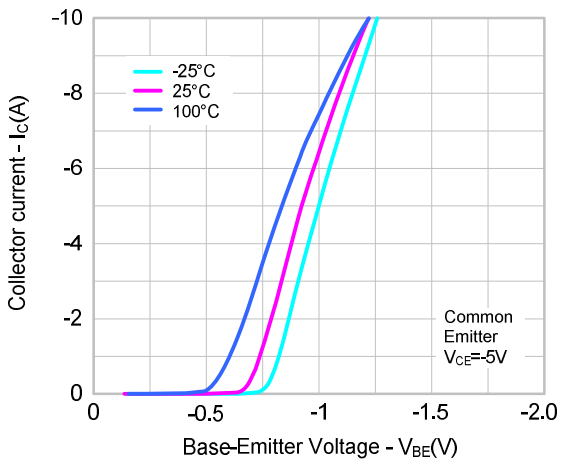
Characteristics	Symbol	Test Condition	Min.	Typ.	Max.	Unit
DC Current Gain	HFE	V_{CE}=-5V, I_C=-1A	55	-	160	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-6A, I_B=-0.6A	-	-	-2	V
Base - Emitter Voltage	V_{BE}	V_{CE}=-5V, I_C=-5A	-	-	-1.5	V
Collector-Base Leakage Current	I_{CBO}	V_{CB}=-120V, I_E=0	-	-	-10	μA
Collector-Emitter Leakage Current	I_{CEO}	V_{CE}=-120V, I_B=0	-	-	100	μA
Emitter -Base Leakage Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-10	μA
Transition Frequency	FT	V_{CE}=-5V, I_C=-1A	-	10	-	MHZ
Collector Output Capacitance	C_{Ob}	V_{CB} =-10V, I_E =0, f =1MHz	-	230	-	pF

TYPICAL ELECTRICAL CHARACTERISTICS CURVE

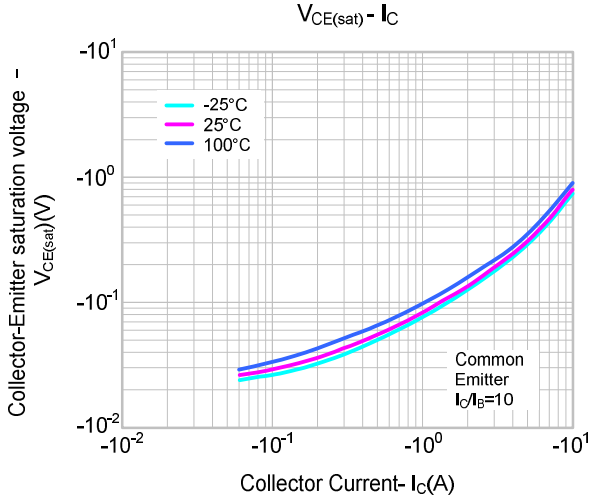
I_C - V_{CE}



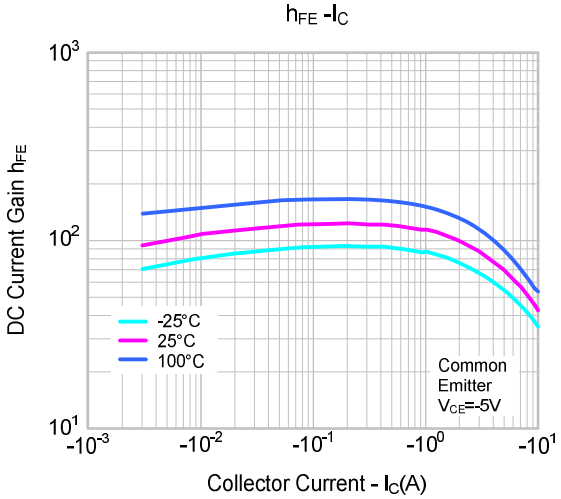
I_C - V_{BE}



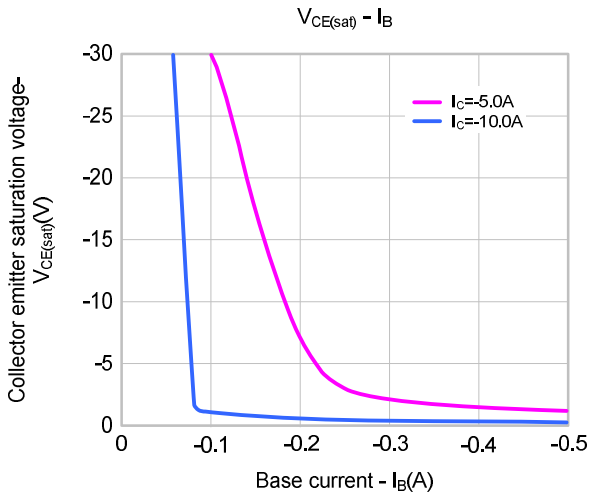
$V_{CE(sat)}$ - I_C

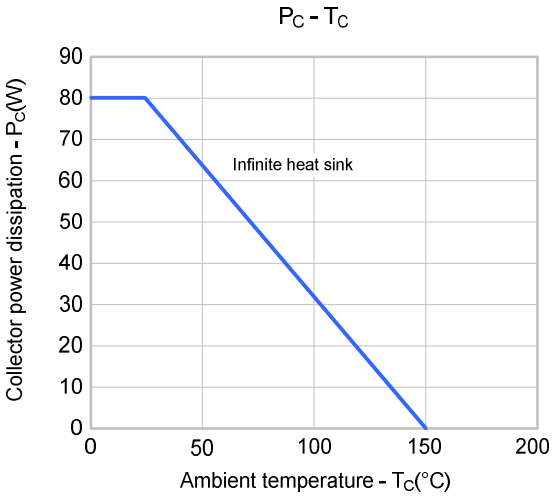


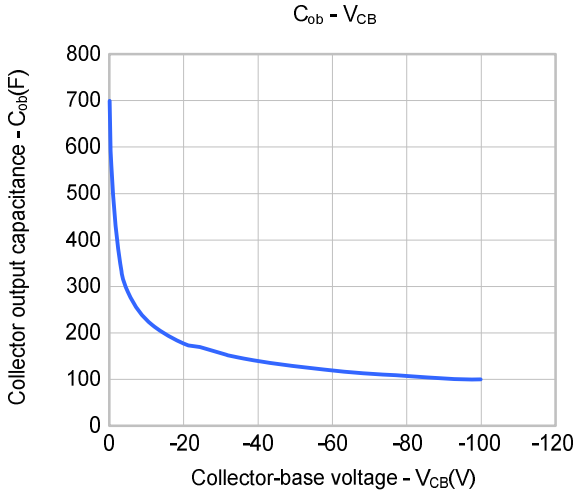
h_{FE} - I_C

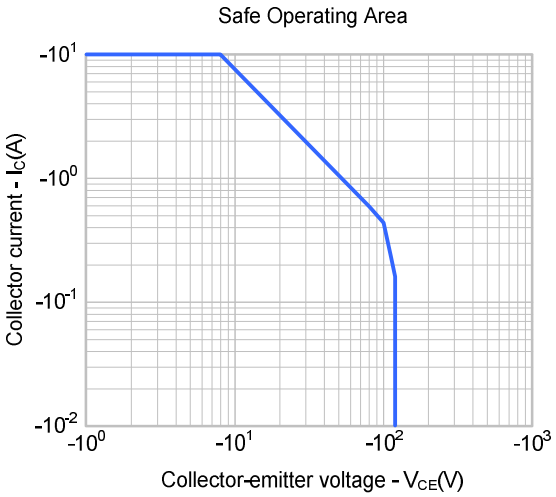


TYPICAL ELECTRICAL CHARACTERISTICS CURVE



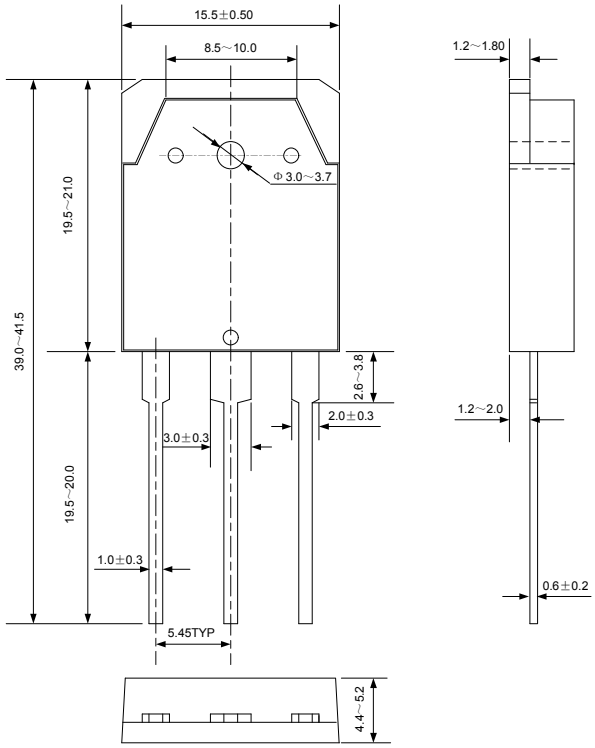






PACKAGE OUTLINE

TO-3P **UNIT: mm**



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Revision History:

1. First release