



SANYO Semiconductors

## DATA SHEET

# 2SA1392 / 2SC3383 — PNP / NPN Epitaxial Planar Silicon Transistors

## Low-Frequency General-Purpose Amp Applications

### Features

- Adoption of FBET process.
- AF amp.

### Specifications ( ) : 2SA1392

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CB0</sub>		(-)60	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>		(-)50	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		(-)6	V
Collector Current	I <sub>C</sub>		(-)200	mA
Collector Current (Pulse)	I <sub>CP</sub>		(-)400	mA
Collector Dissipation	P <sub>C</sub>		500	mW
Junction Temperature	T <sub>J</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°C

### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)40V, I <sub>E</sub> =0A			(-)0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)5V, I <sub>C</sub> =0A			(-)0.1	μA
DC Current Gain	h <sub>FE1</sub>	V <sub>CE</sub> =(-)6V, I <sub>C</sub> =(-)1mA	100*		560*	
	h <sub>FE2</sub>	V <sub>CE</sub> =(-)6V, I <sub>C</sub> =(-)0.1mA	70			
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-10mA		(200)250		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =(-)6V, f=1MHz		(3.7)2.7		pF
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)100mA, I <sub>B</sub> =(-)10mA			(-)0.3	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)100mA, I <sub>B</sub> =(-)10mA			(-)1.0	V
Collector-to-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =(-)10μA, I <sub>E</sub> =0A	(-)60			V
Collector-to-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =(-)1mA, R <sub>BE</sub> =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =(-)10μA, I <sub>C</sub> =0A	(-)6			V

\* : The 2SA1392 / 2SC3383 are classified by 1mA h<sub>FE</sub> as follows:

Rank	R	S	T	U
h <sub>FE</sub>	100 to 200	140 to 280	200 to 400	280 to 560

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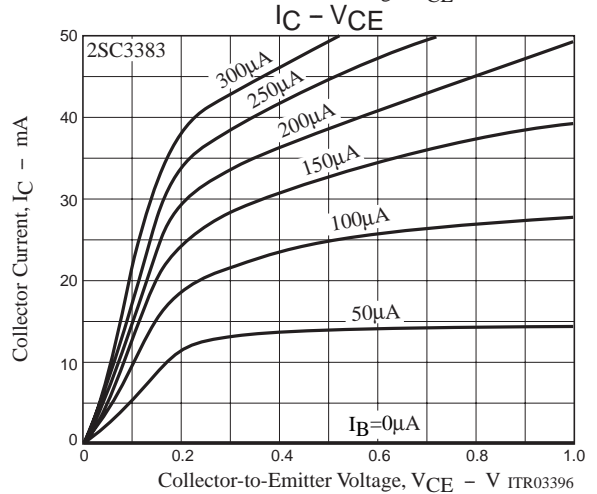
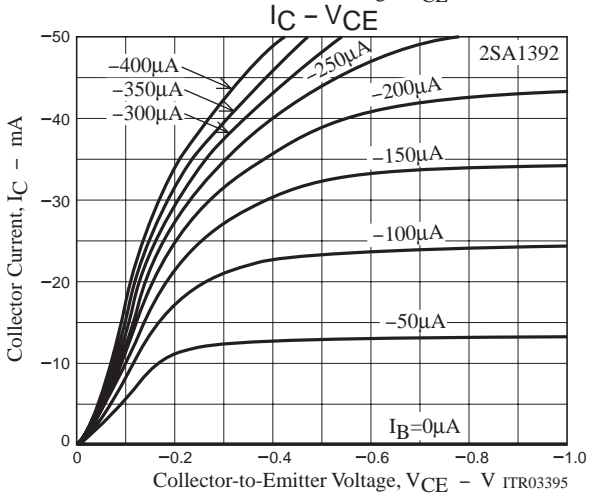
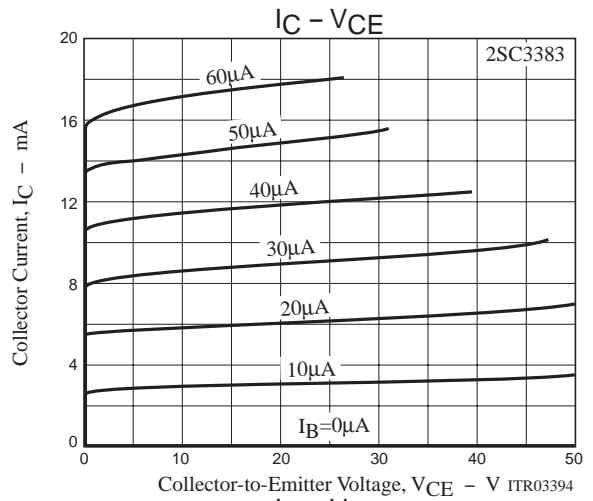
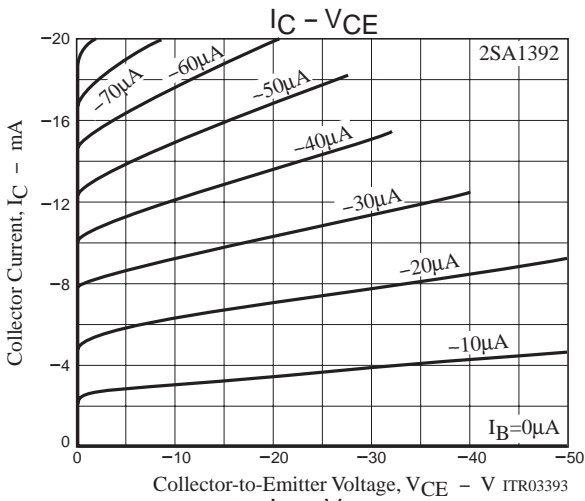
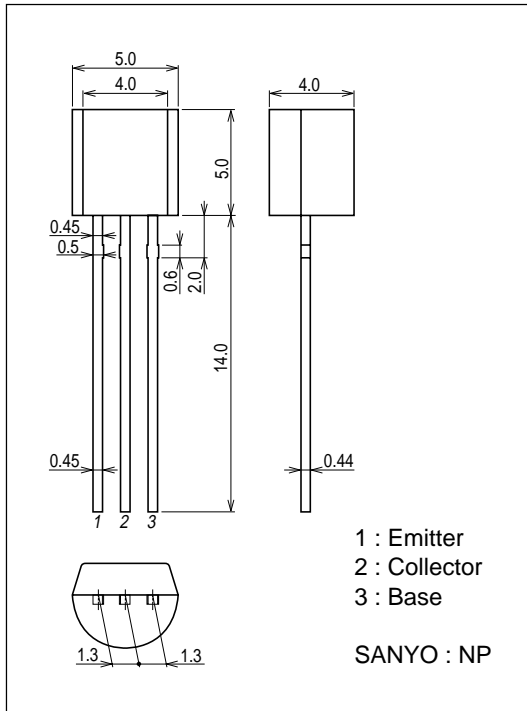
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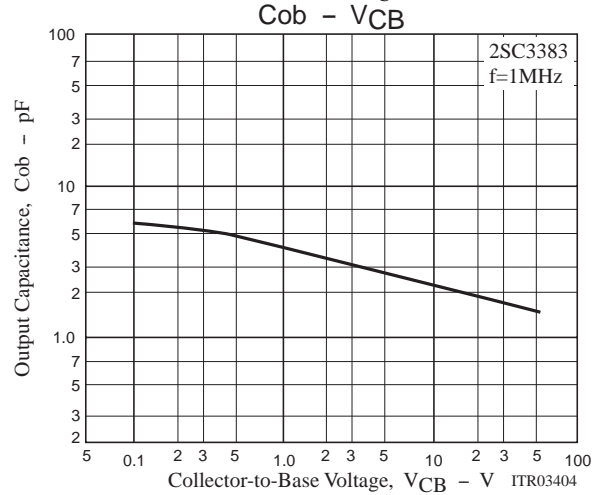
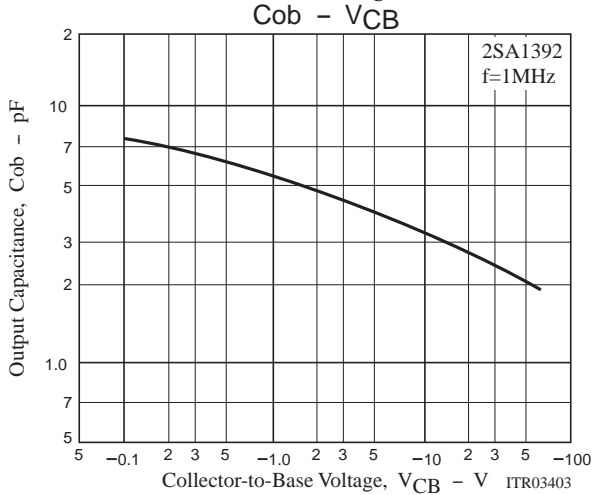
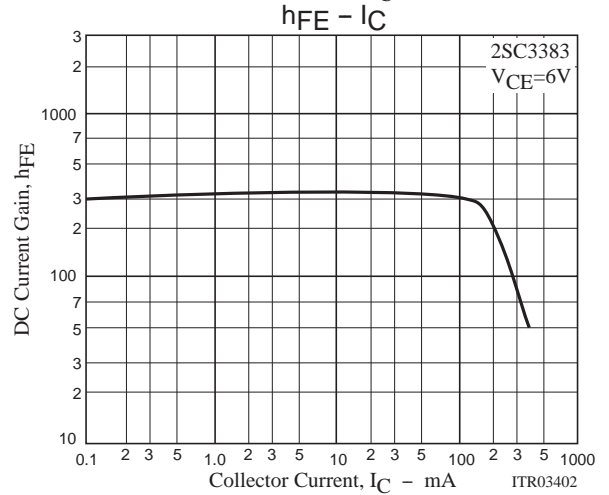
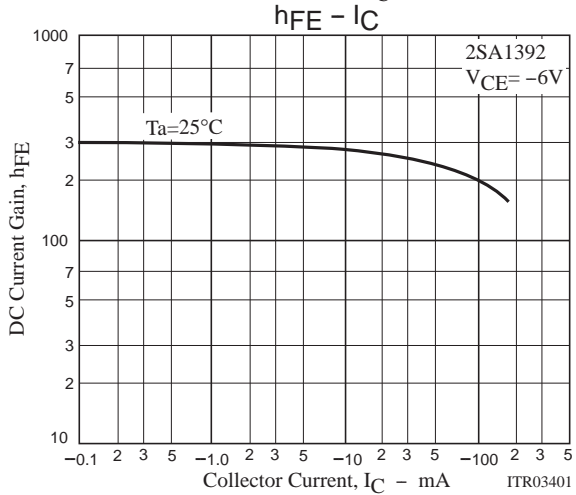
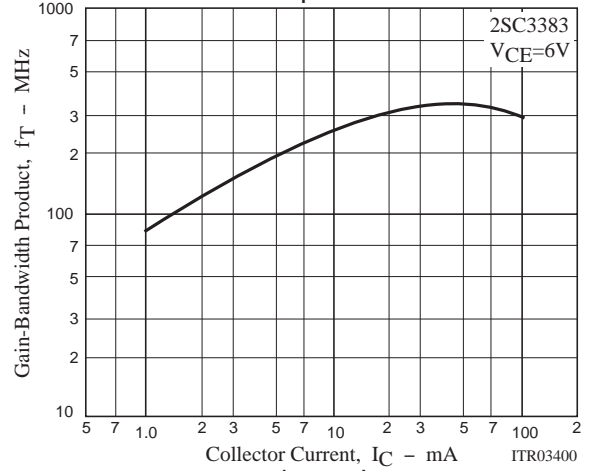
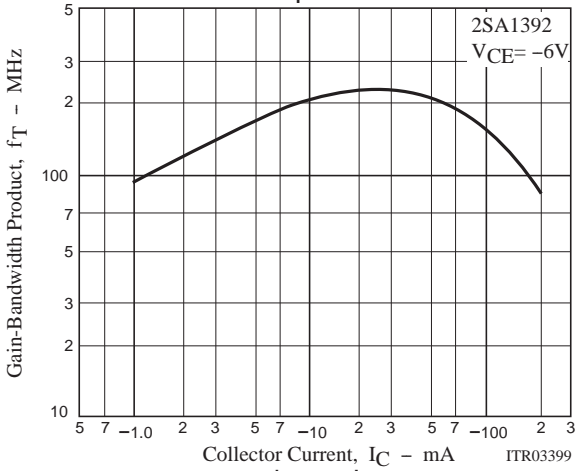
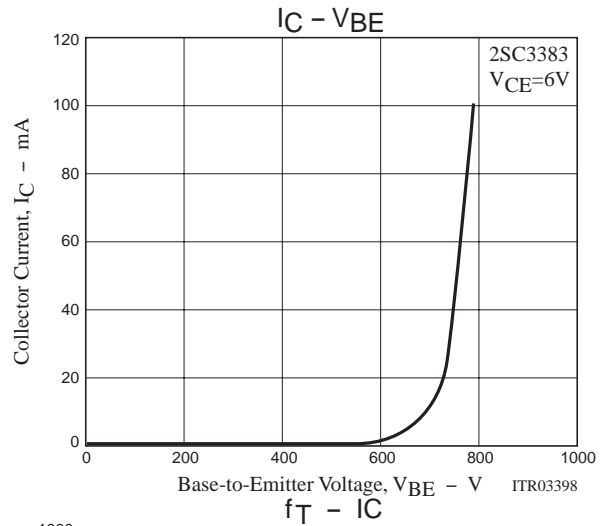
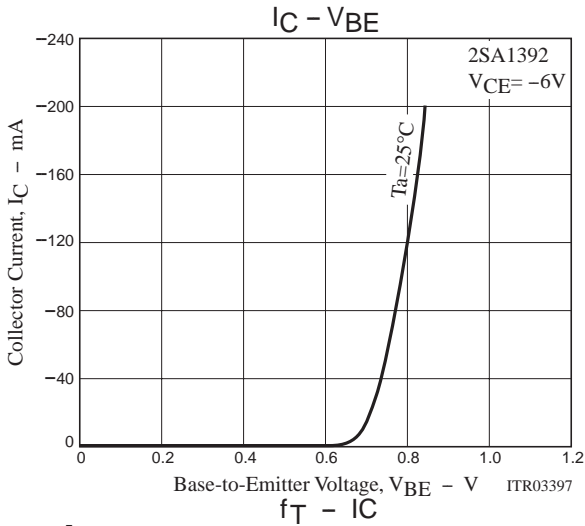
Package Dimensions

unit : mm (typ)

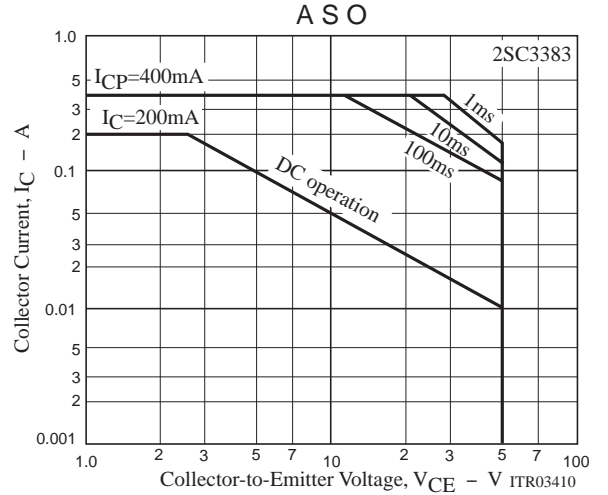
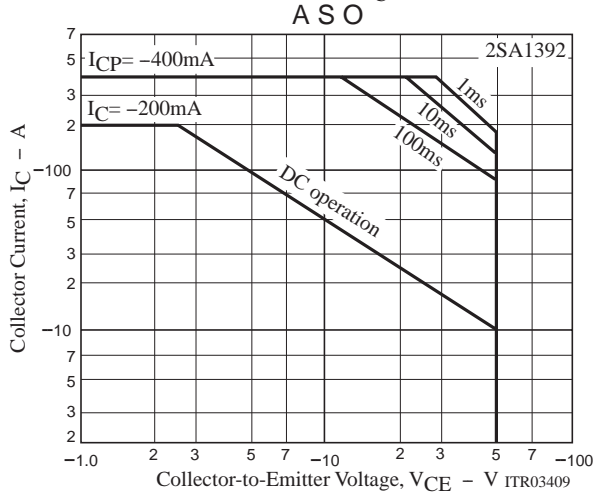
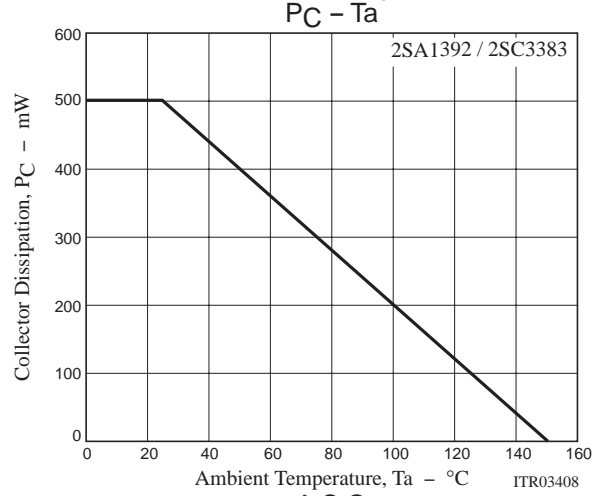
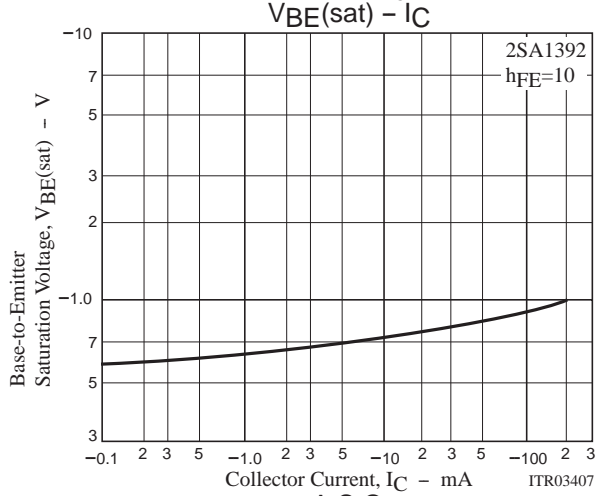
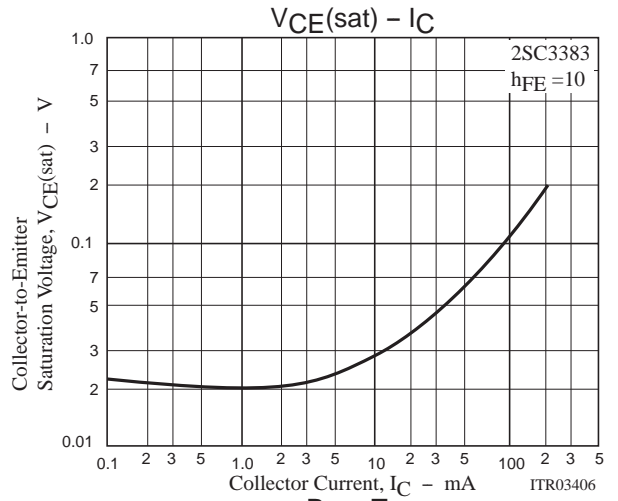
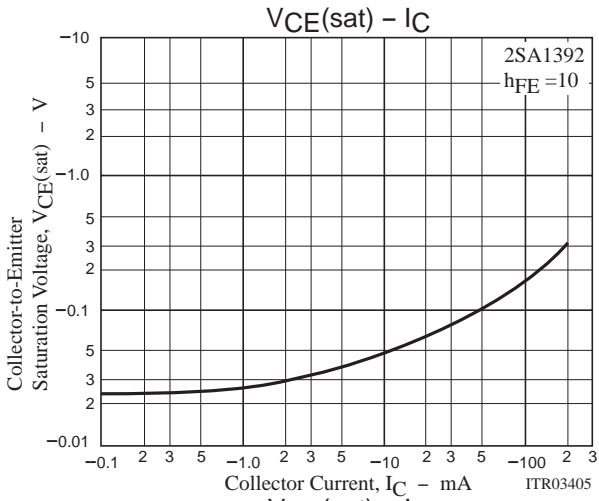
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2SA1392 / 2SC3383



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