



## 2SA1392/2SC3383

### AF Amp Applications

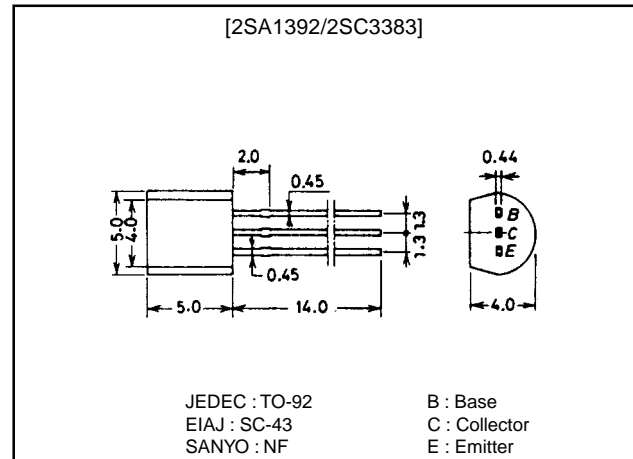
#### Features

- Adoption of FBET process.
- AF amp.

#### Package Dimensions

unit:mm

2003A



() : 2SA1392

#### Specifications

##### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-)60	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-)50	V
Emitter-to-Base Voltage	$V_{EBO}$		(-)6	V
Collector Current	$I_C$		(-)200	mA
Collector Current (Pulse)	$I_{CP}$		(-)400	mA
Collector Dissipation	$P_C$		400	mW
Junction Temperature	$T_j$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

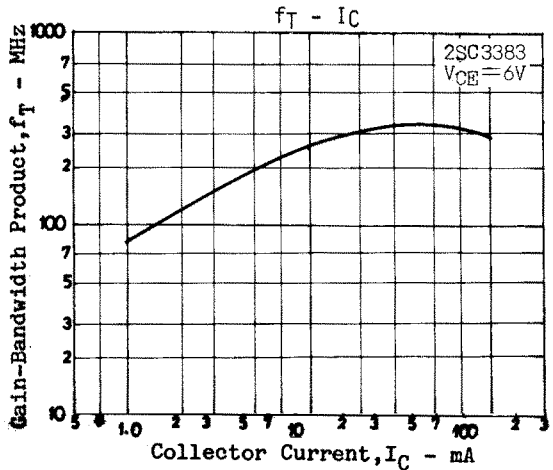
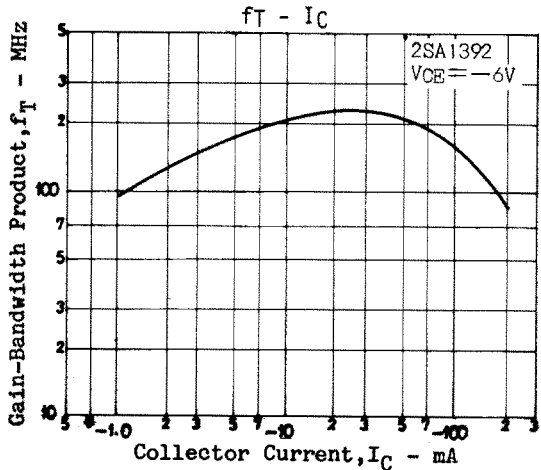
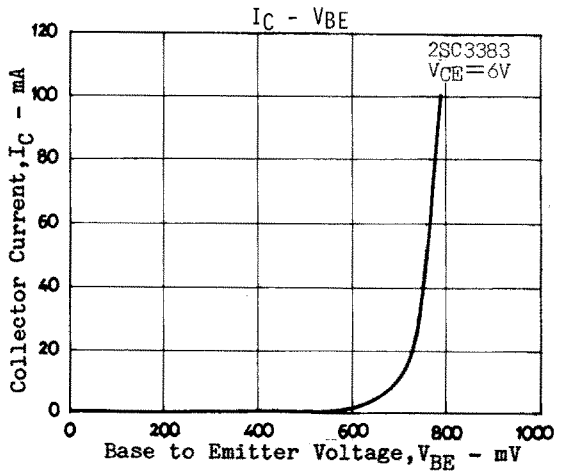
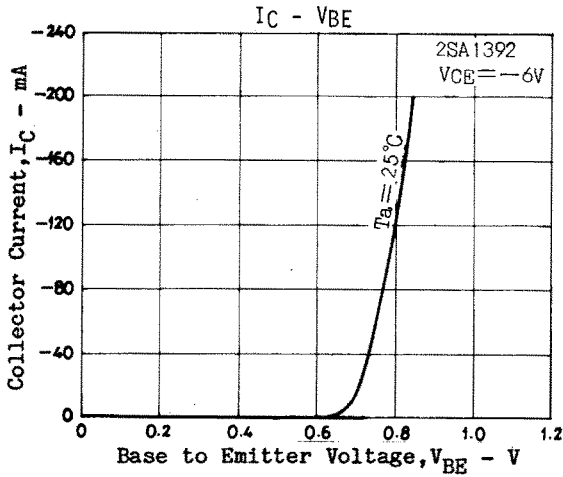
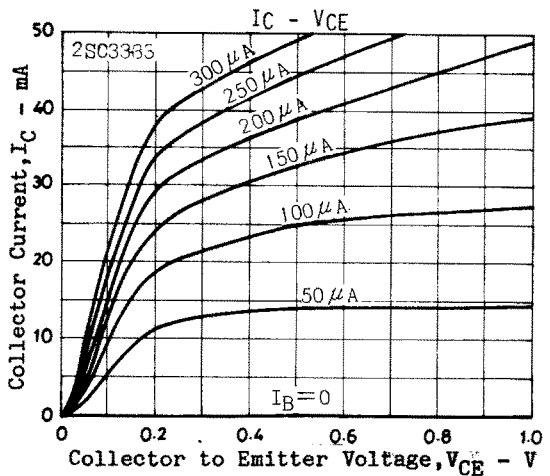
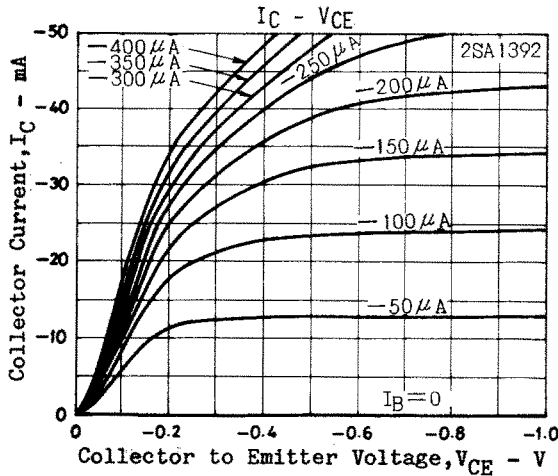
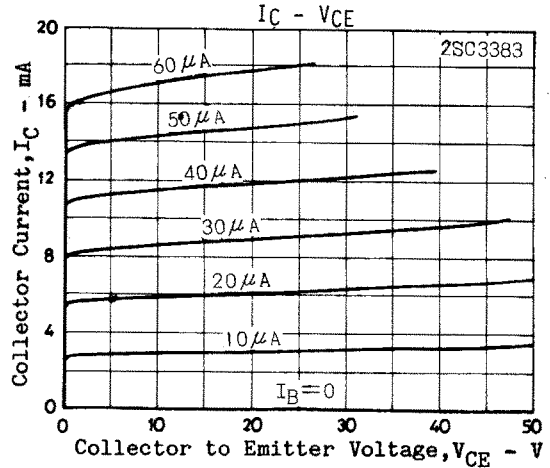
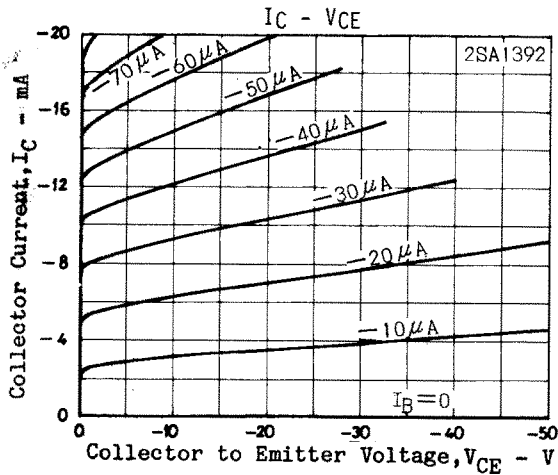
##### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)40V, I_E = 0$			(-)0.1	μA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)5V, I_C = 0$			(-)0.1	μA
DC Current Gain	$h_{FE1}$	$V_{CE} = (-)6V, I_C = (-)1mA$	100*		560*	
	$h_{FE2}$	$V_{CE} = (-)6V, I_C = (-)0.1mA$	70			
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-)6V, I_C = (-)10mA$		250		MHz
				(200)		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)100mA, I_B = (-)10mA$			(-)0.3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)100mA, I_B = (-)10mA$			(-)1.0	V
Output Capacitance	$C_{ob}$	$V_{CB} = (-)6V, f = 1MHz$		2.7		pF
				(3.7)		pF
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10μA, I_E = 0$	(-)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = ∞$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)10μA, I_C = 0$	(-)6			V

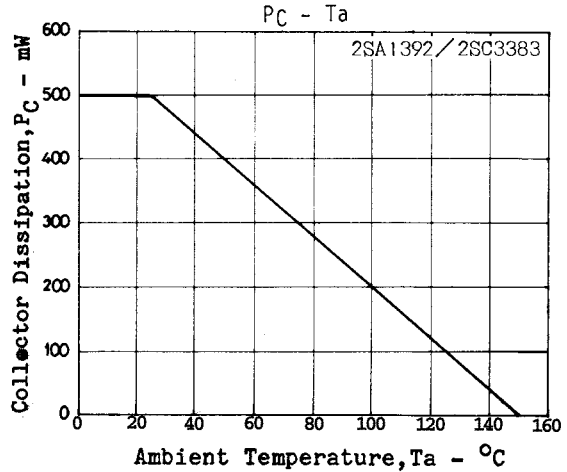
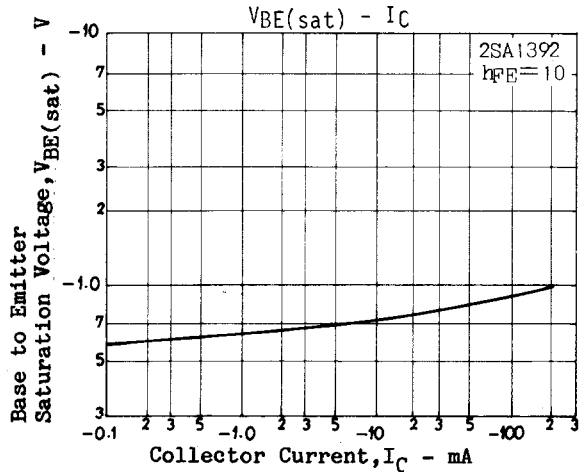
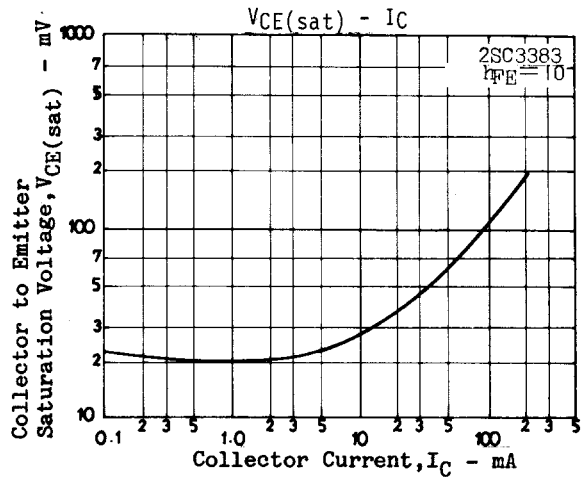
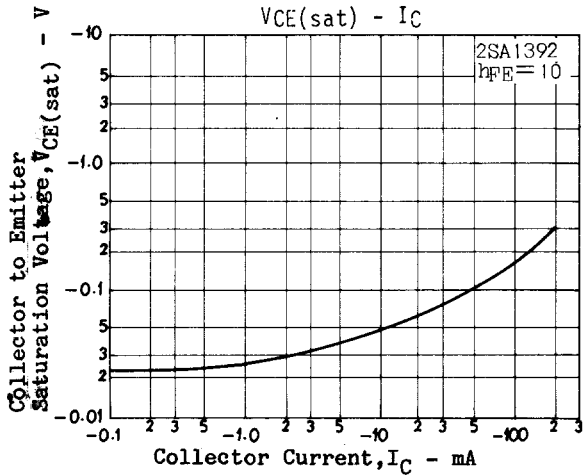
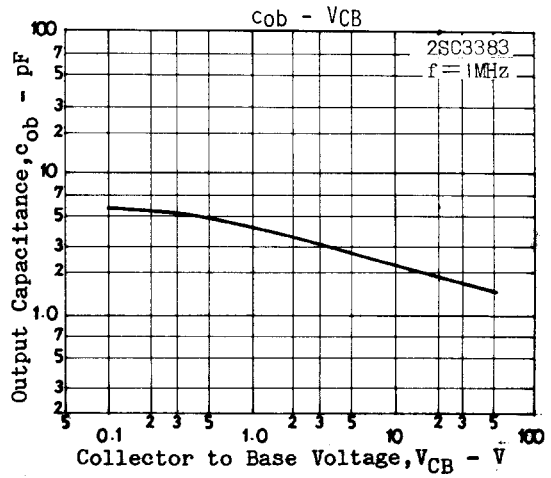
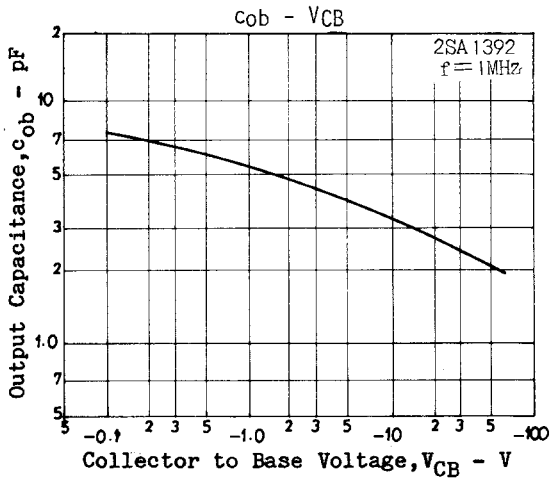
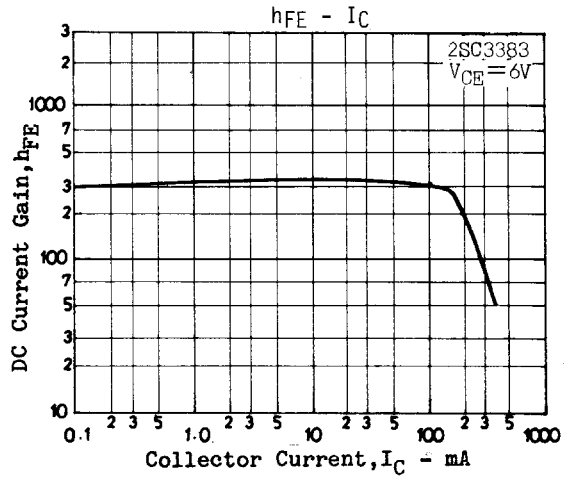
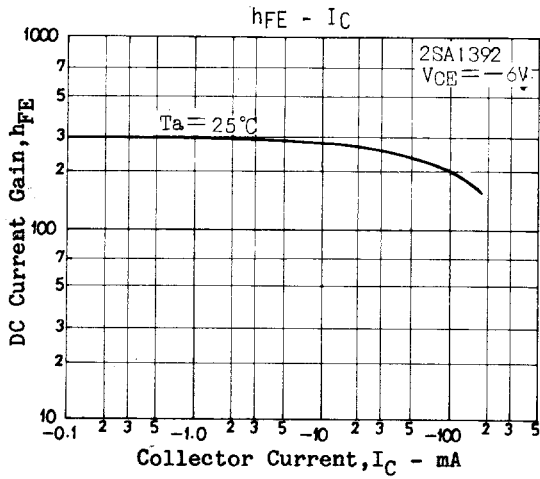
\* : The 2SA1392/2SC3383 are classified by 1mA  $h_{FE}$  as follows :

100 R	200	140 S	280	200 T	400	280 U	560
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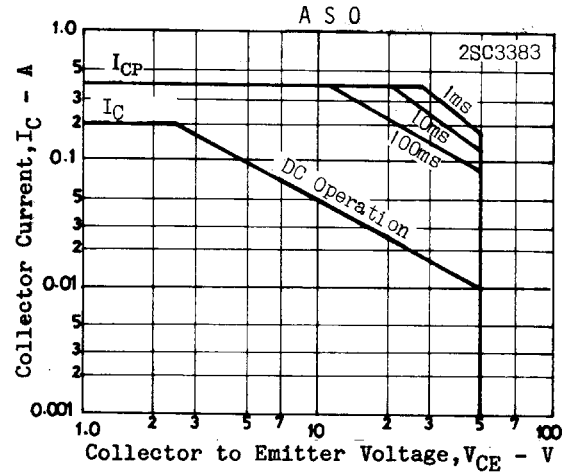
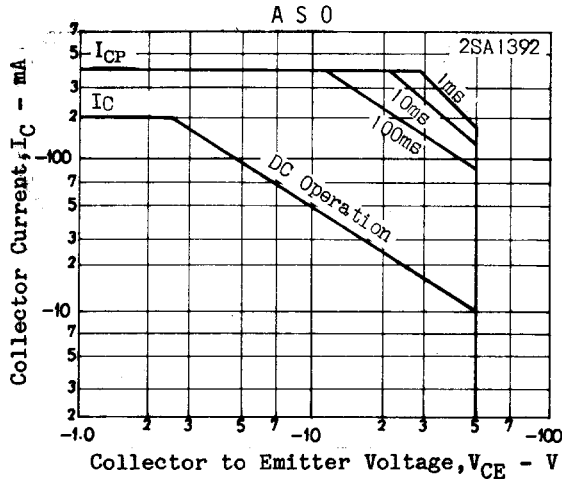
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