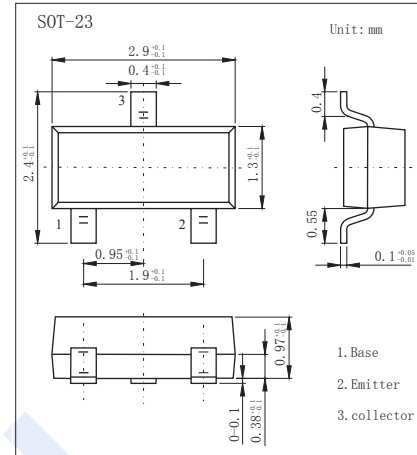


## NPN Transistors

### 2SC3392-HF

#### ■ Features

- High breakdown voltage
- Large current capacity and high fr.
- High-Speed Switching Applications
- Complementary to 2SA1338-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	60	V
Collector - Emitter Voltage	$V_{CE0}$	50	
Emitter - Base Voltage	$V_{EB0}$	5	
Collector Current - Continuous	$I_C$	500	mA
Collector Current - Pulse	$I_{CP}$	800	
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_C = 100 \mu\text{A}$ , $I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_C = 1 \text{ mA}$ , $R_{BE} = \infty$	50			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}$ , $I_C = 0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 40 \text{ V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 4 \text{ V}$ , $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}$ , $I_B = 10 \text{ mA}$		0.1	0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 \text{ mA}$ , $I_B = 10 \text{ mA}$		0.8	1.2	
DC current gain	$h_{FE}$	$V_{CE} = 5 \text{ V}$ , $I_C = 10 \text{ mA}$	90		560	
Turn-ON Time	$t_{on}$	$V_{CC} = 20 \text{ V}$ , $I_C = 10 \text{ mA}$ , $I_{B1} = 10 \text{ mA}$ , $I_{B2} = 100 \text{ mA}$		70		ns
Storage Time	$t_{stg}$			400		
Fall Time	$t_f$			70		
Collector output capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}$ , $f = 1 \text{ MHz}$		3.7		pF
Transition frequency	$f_T$	$V_{CE} = 10 \text{ V}$ , $I_C = 50 \text{ mA}$		300		MHz

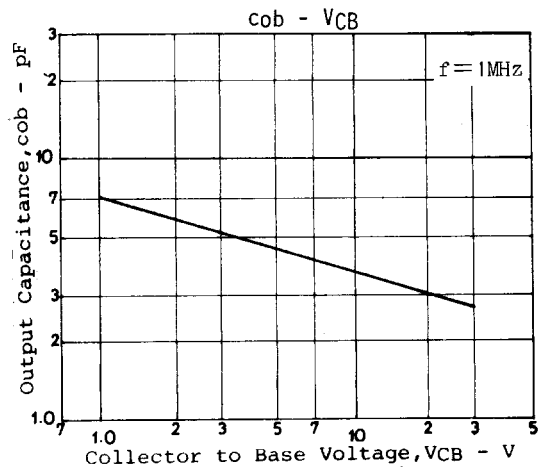
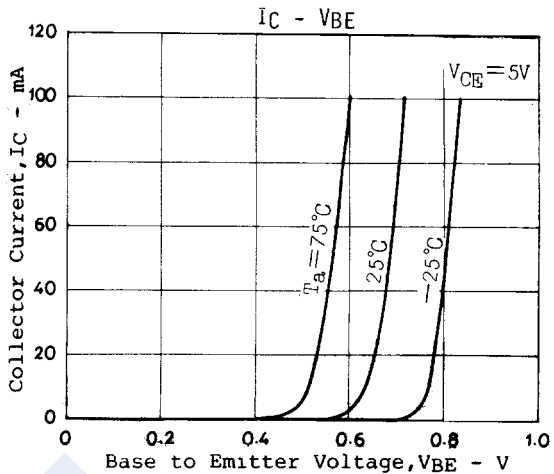
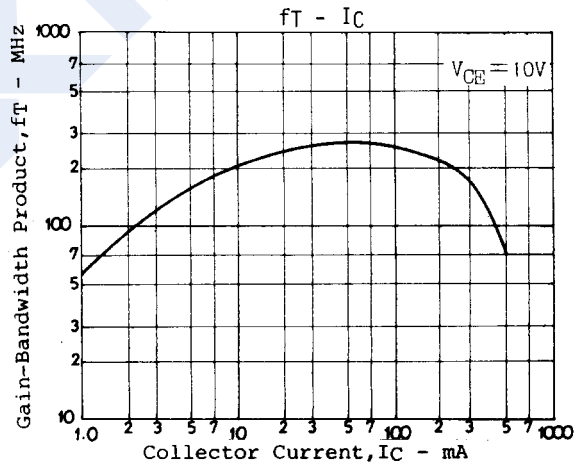
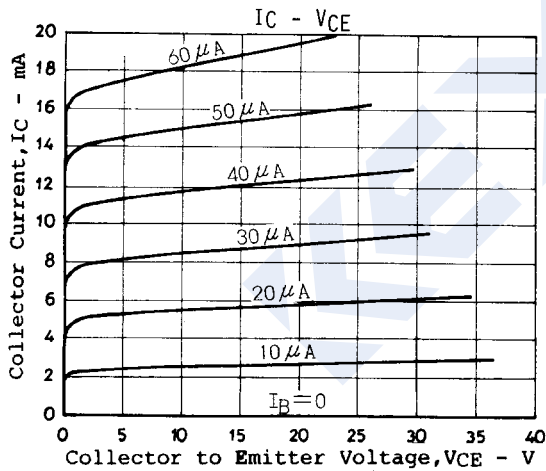
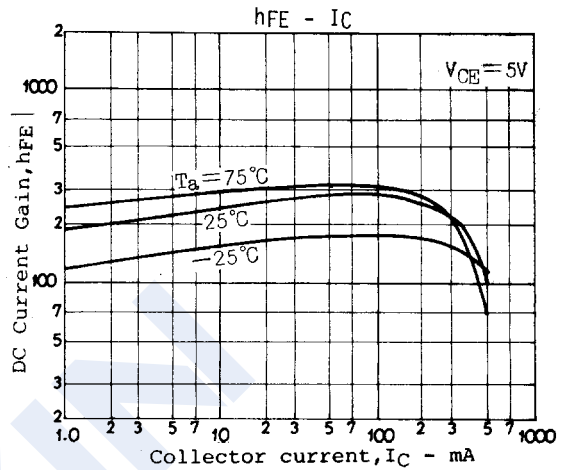
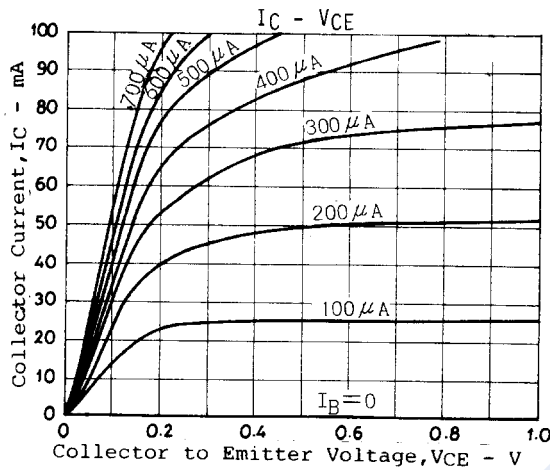
#### ■ Classification of $h_{FE}$

Type	2SC3392-AY4-HF	2SC3392-AY5-HF	2SC3392-AY6-HF	2SC3392-AY7-HF
Range	100-200	140-280	200-400	280-560
Marking	AY4 <sub>F</sub>	AY5 <sub>F</sub>	AY6 <sub>F</sub>	AY7 <sub>F</sub>

NPN Transistors

2SC3392-HF

Typical Characteristics



### NPN Transistors

### 2SC3392-HF

■ Typical Characteristics

