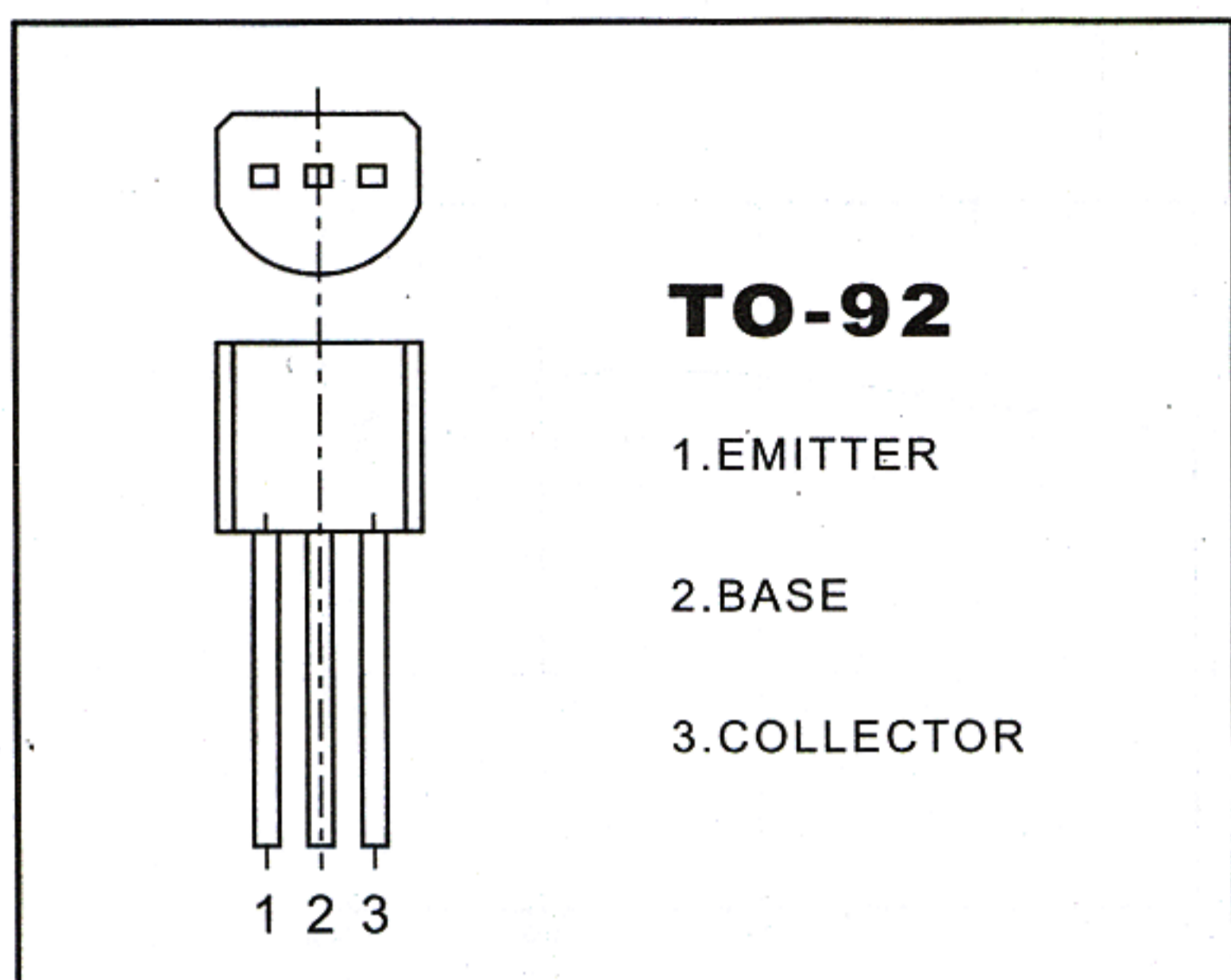


## SS8050 TRANSISTOR(NPN)



### FEATURES

#### Power dissipation

$P_{CM}$ : 1W ( $T_{amb}=25^{\circ}C$ )

#### Collector current

$I_{CM}$ : 1.5 A

#### Collector-base voltage

$V_{(BR)CBO}$ : 40 V

#### Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

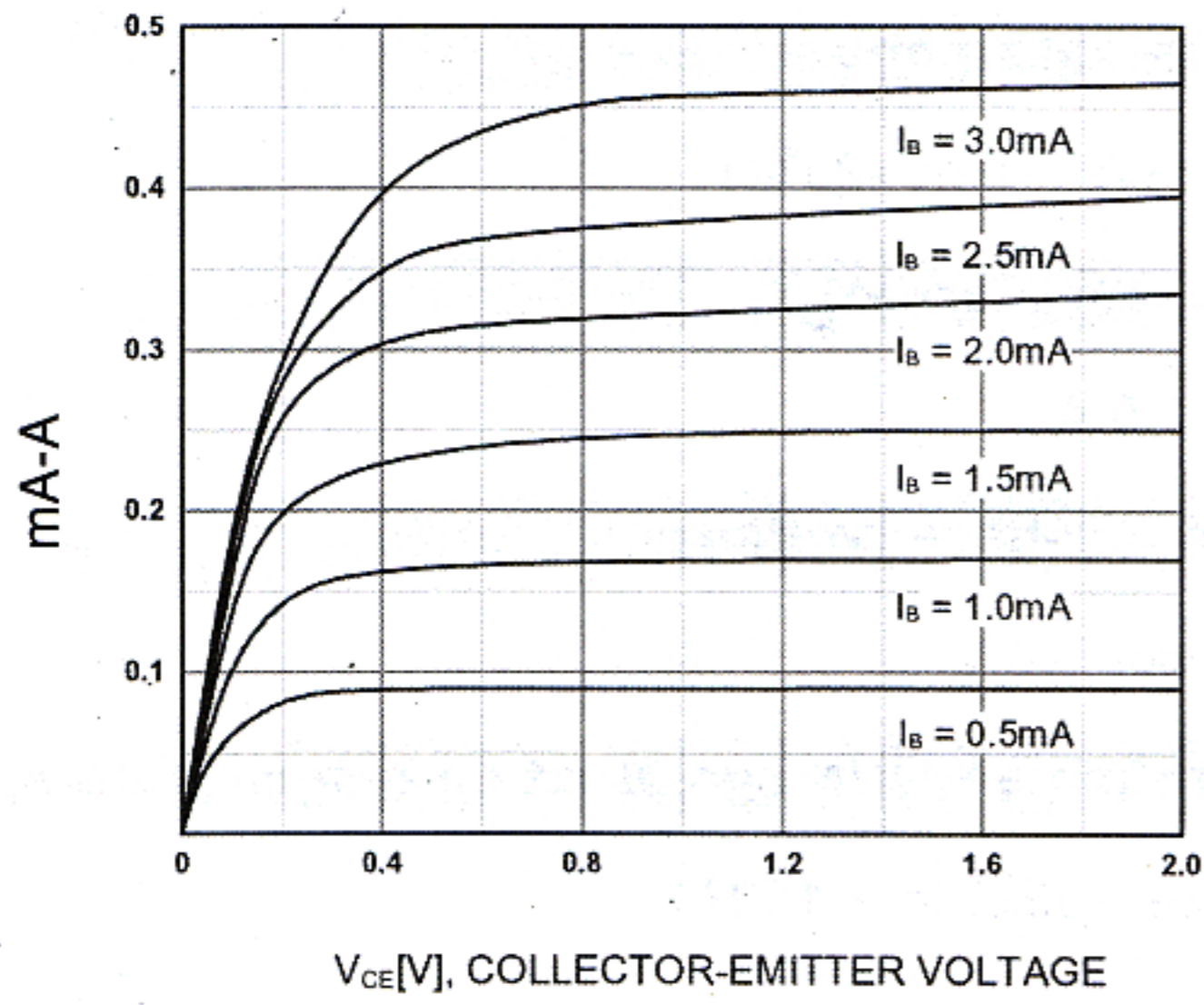
### ELECTRICAL CHARACTERISTICS

( $T_{amb}=25^{\circ}C$  unless otherwise specified)

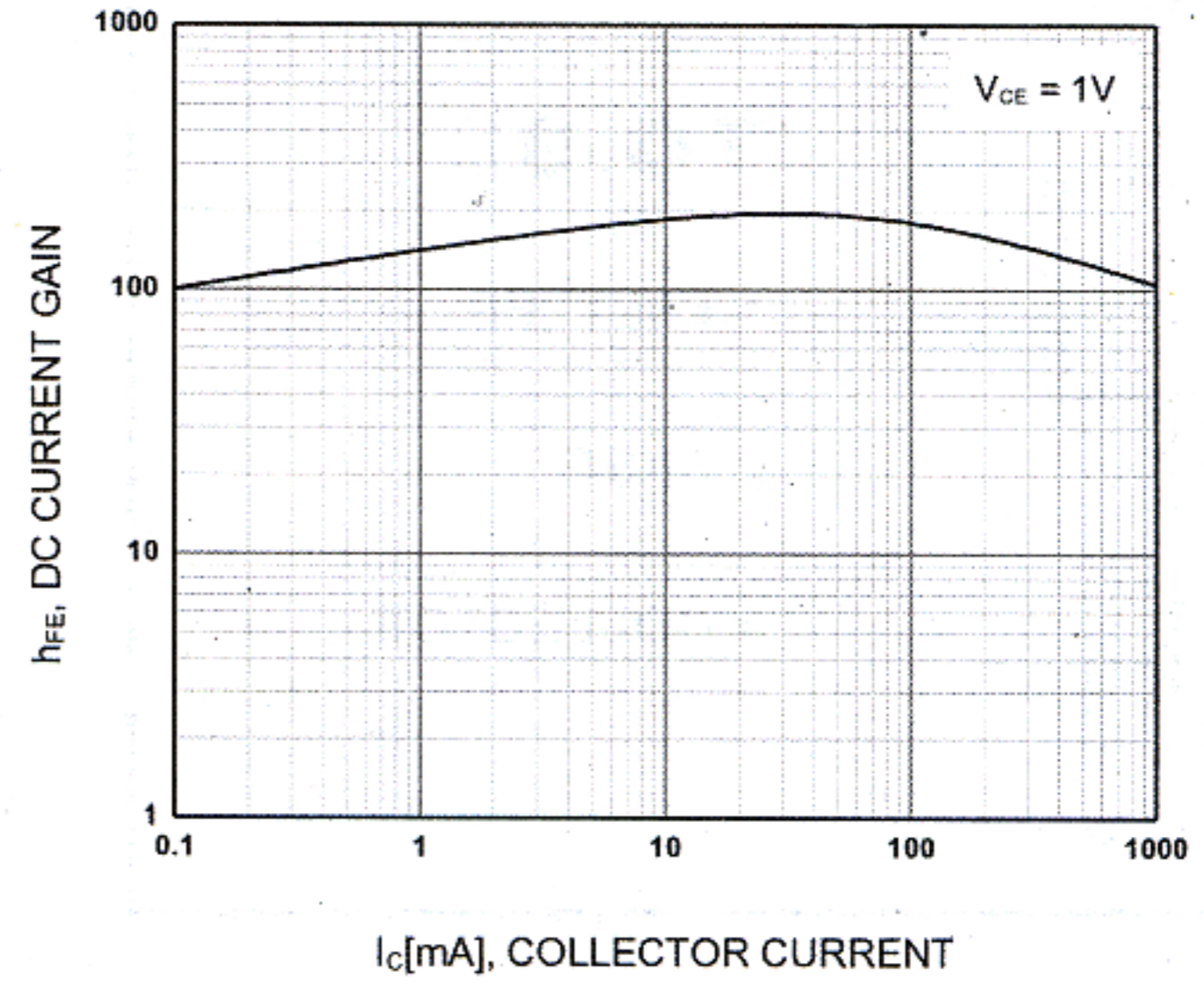
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100 \mu A, I_E = 0$	40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1 mA, I_B = 0$	25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100 \mu A, I_C = 0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 40 V, I_E = 0$		0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = 20 V, I_B = 0$		0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5 V, I_C = 0$		0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = 1 V, I_C = 100 mA$	85	300	
	$h_{FE(2)}$	$V_{CE} = 1 V, I_C = 800 mA$	40		
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C = 800 mA, I_B = 80 mA$		0.5	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C = 800 mA, I_B = 80 mA$		1.2	V
Base-emitter voltage	$V_{BE}$	$I_E = 1.5 A$		1.6	V
Transition frequency	$f_t$	$V_{CE} = 10 V, I_C = 50 mA$ $f = 30 MHz$	190		MHz

### CLASSIFICATION OF $h_{FE(1)}$

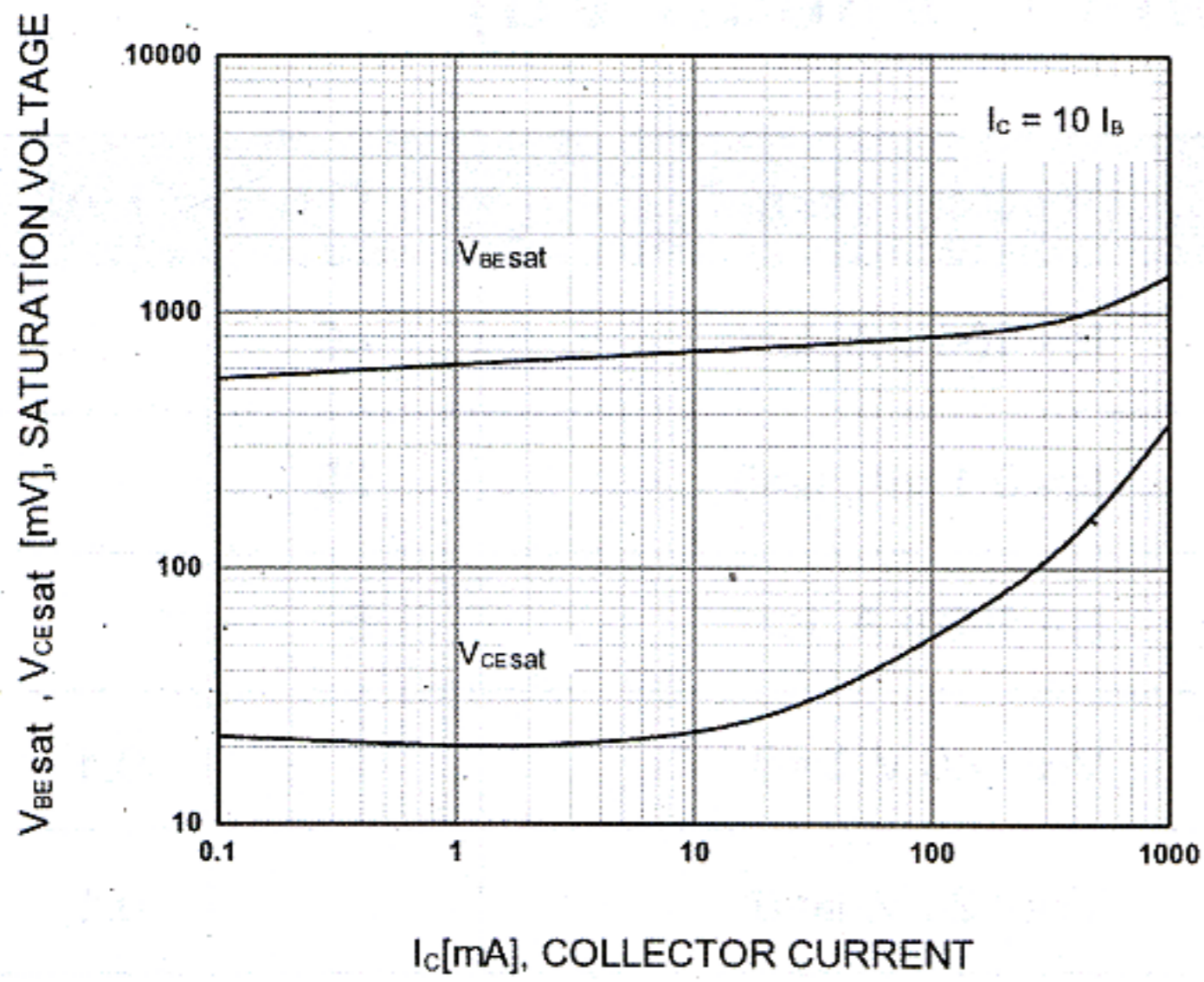
Rank	B	C	D
Range	85-160	120-200	160-300



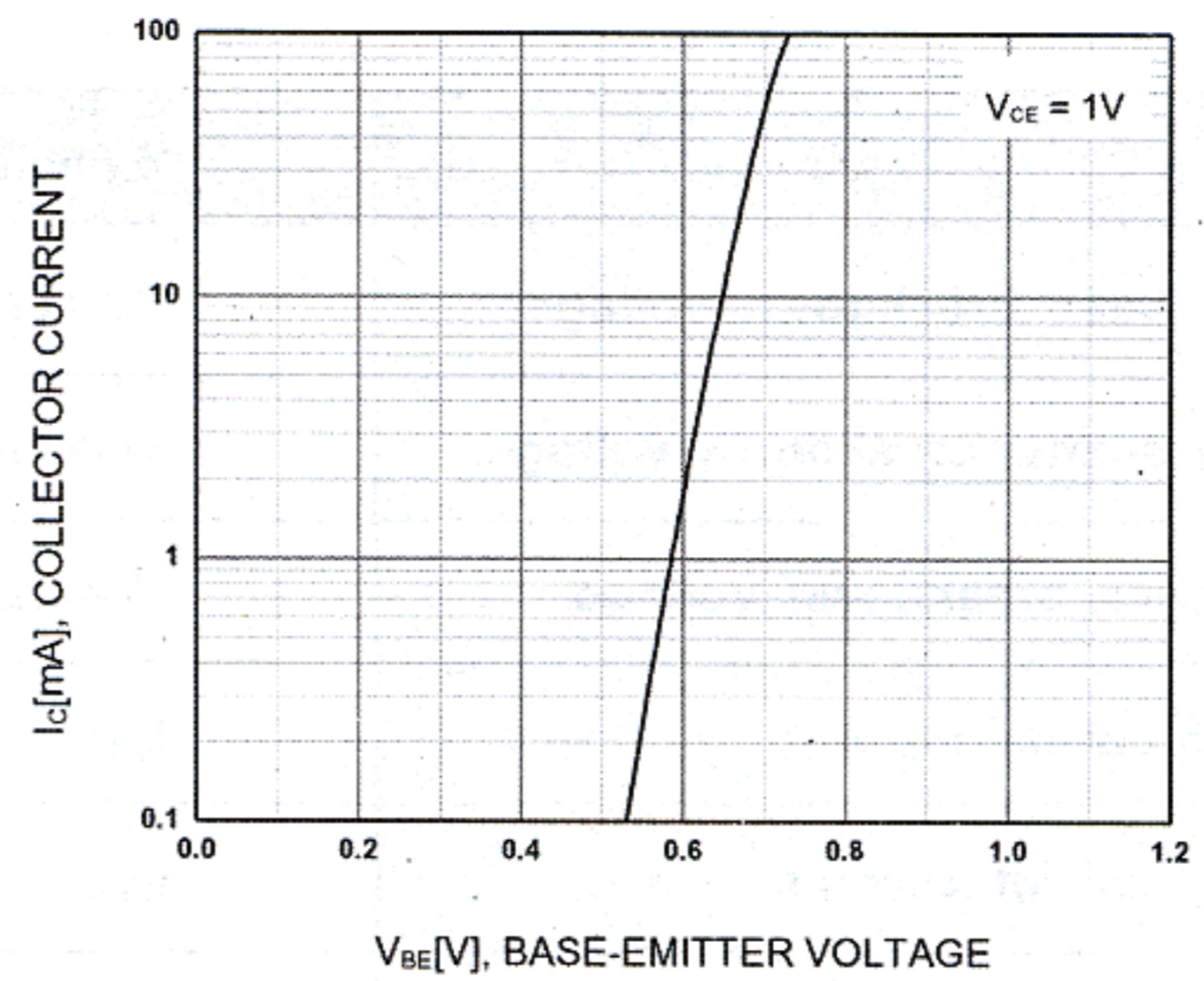
**Static Characteristic**



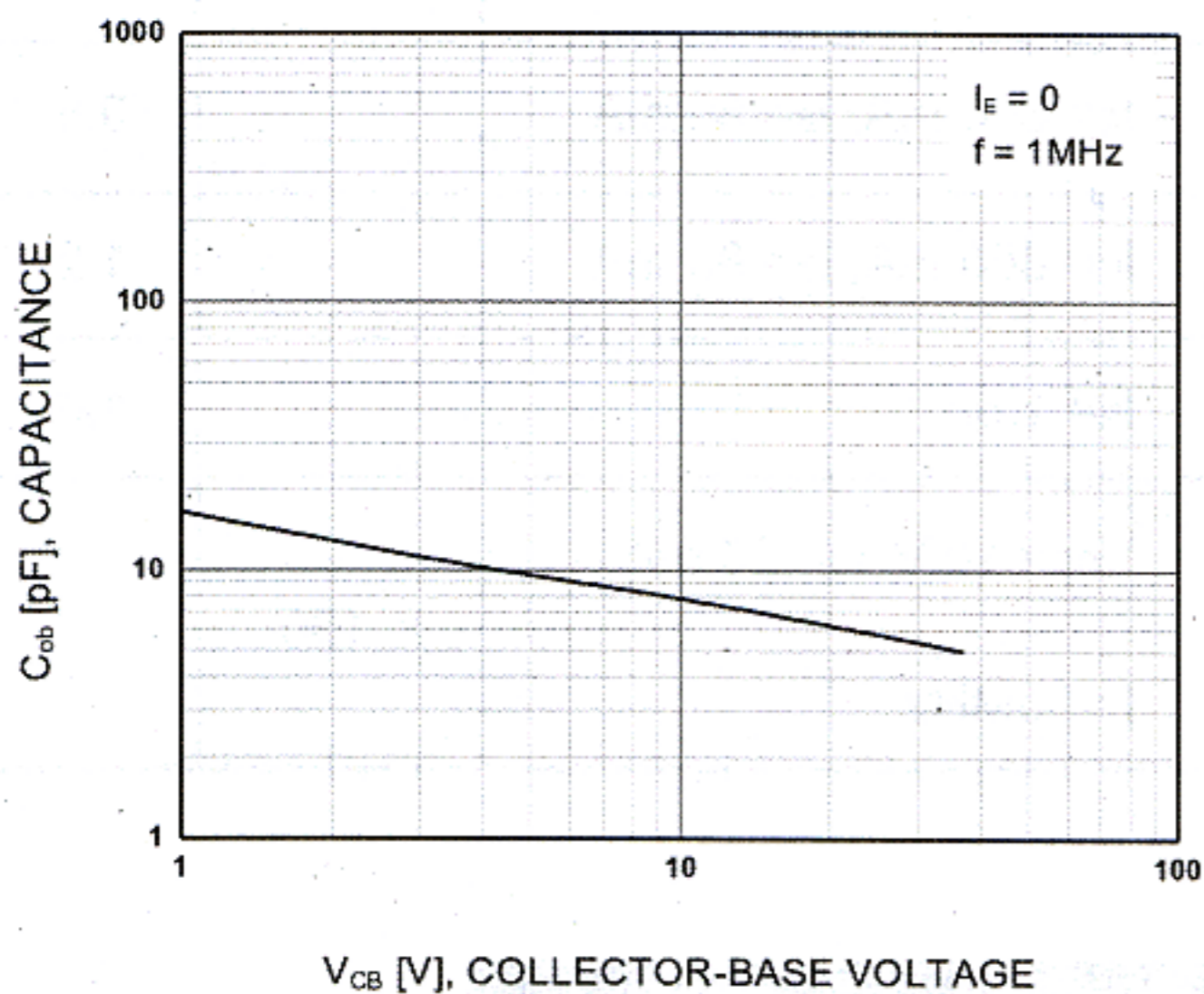
**DC current Gain**



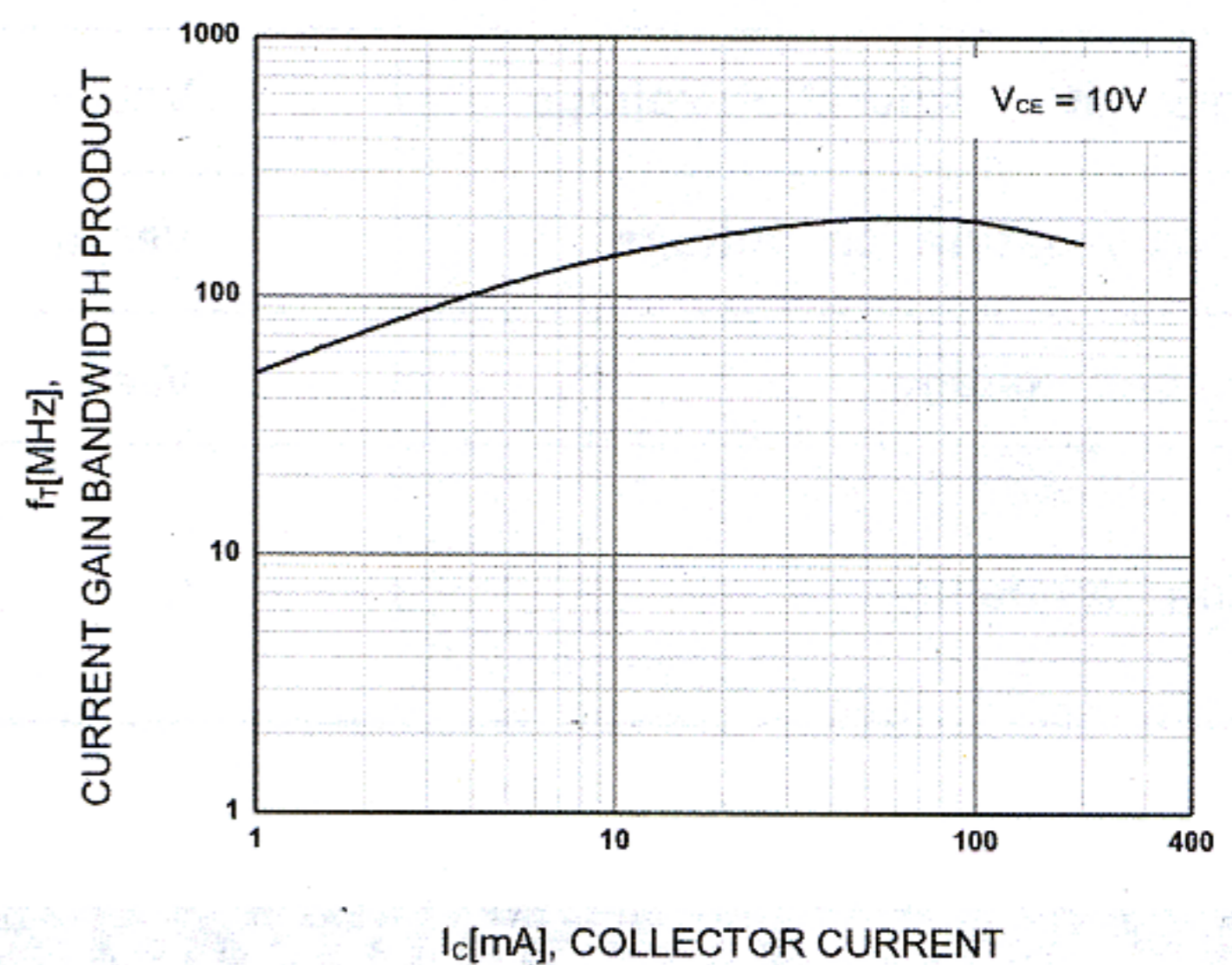
**Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Base-Emitter On Voltage**



**Collector Output Capacitance**



**Current Gain Bandwidth Product**