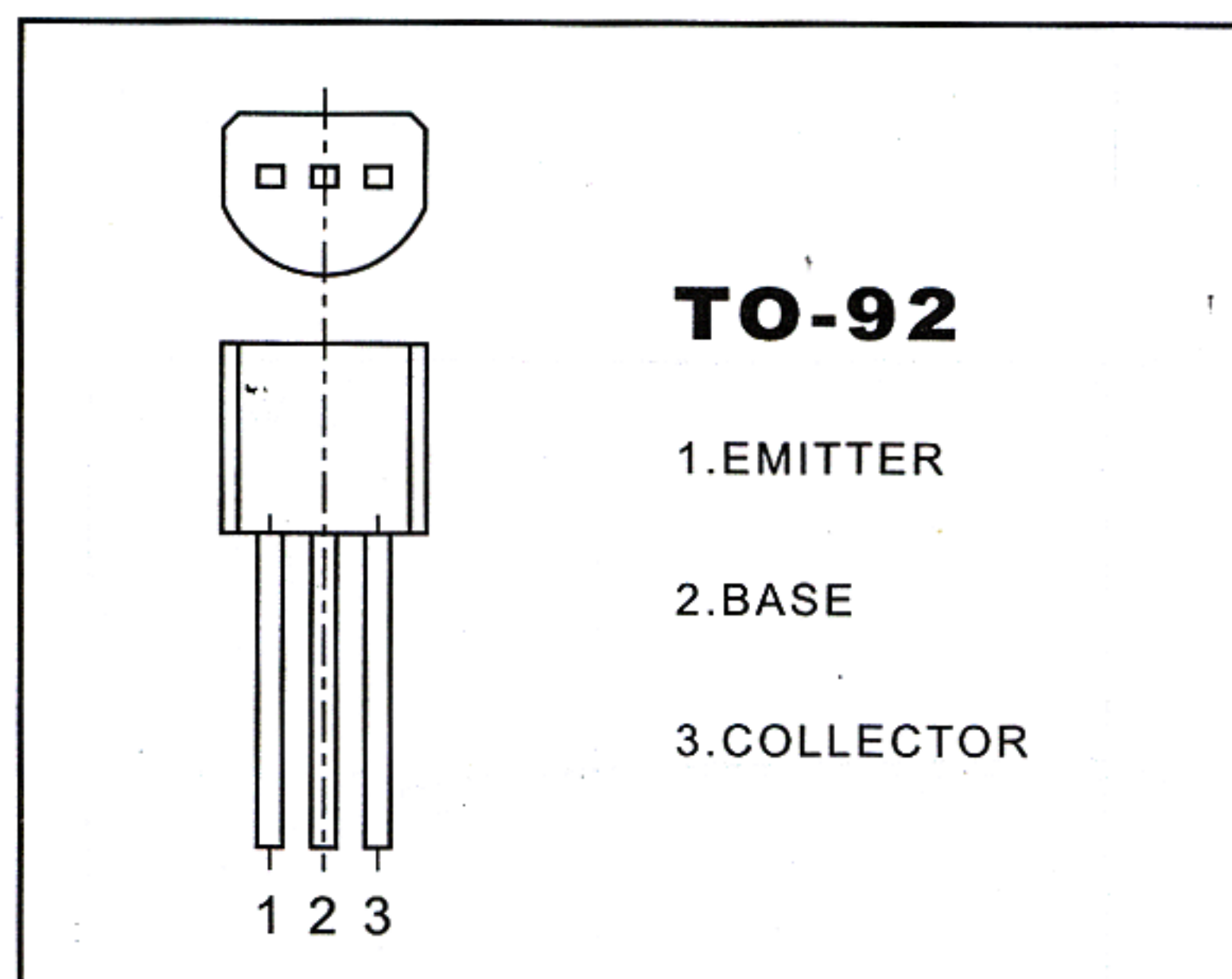


S9012 TRANSISTOR(PNP)



FEATURES

Power dissipation

 P_{CM} : 0.625W ($T_{amb}=25^{\circ}\text{C}$)

Collector current

 I_{CM} : -0.5 A

Collector-base voltage

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

Operating and storage junction temperature range

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

ELECTRICAL CHARACTERISTICS

(T_{amb}=25°C unless otherwise specified)

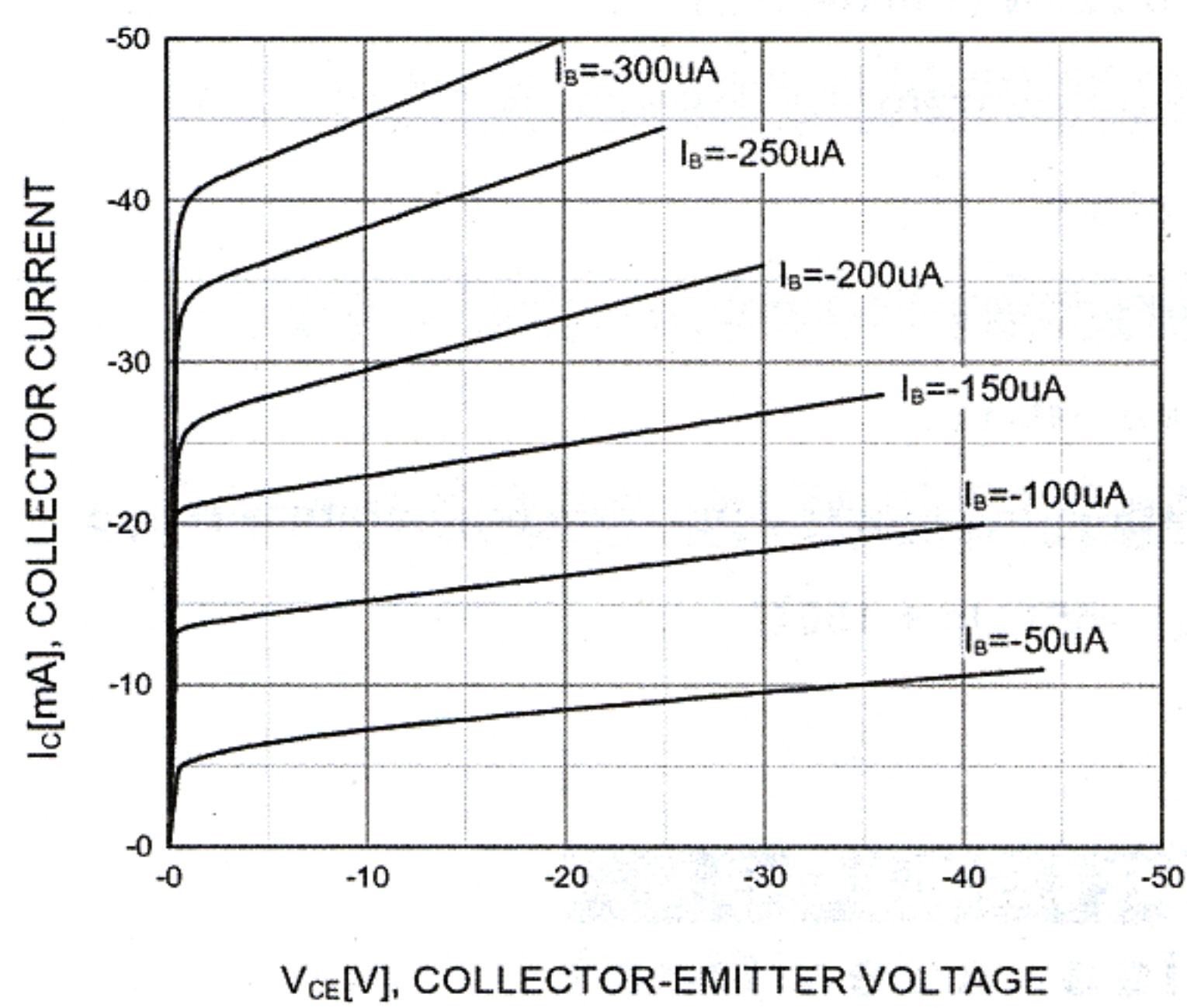
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\ \mu\text{A}$, $I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1\ \text{mA}$, $I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\ \mu\text{A}$, $I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\ \text{V}$, $I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20\ \text{V}$, $I_B = 0$		-0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\ \text{V}$, $I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\ \text{V}$, $I_C = -50\ \text{mA}$	64	300	
	$h_{FE(2)}$	$V_{CE} = -1\ \text{V}$, $I_C = -500\ \text{mA}$	40		
Collector-emitter saturation voltage	V_{CEsat}	$I_C = -500\ \text{mA}$, $I_B = -50\ \text{mA}$		-0.6	V
Base-emitter saturation voltage	V_{BEsat}	$I_C = -500\ \text{mA}$, $I_B = -50\ \text{mA}$		-1.2	V
Base-emitter voltage	V_{EB}	$I_E = -100\ \text{mA}$		-1.4	V
Transition frequency	f_T	$V_{CE} = -6\ \text{V}$, $I_C = -20\ \text{mA}$ $f = 30\ \text{MHz}$	150		MHz

CLASSIFICATION OF $h_{FE(1)}$

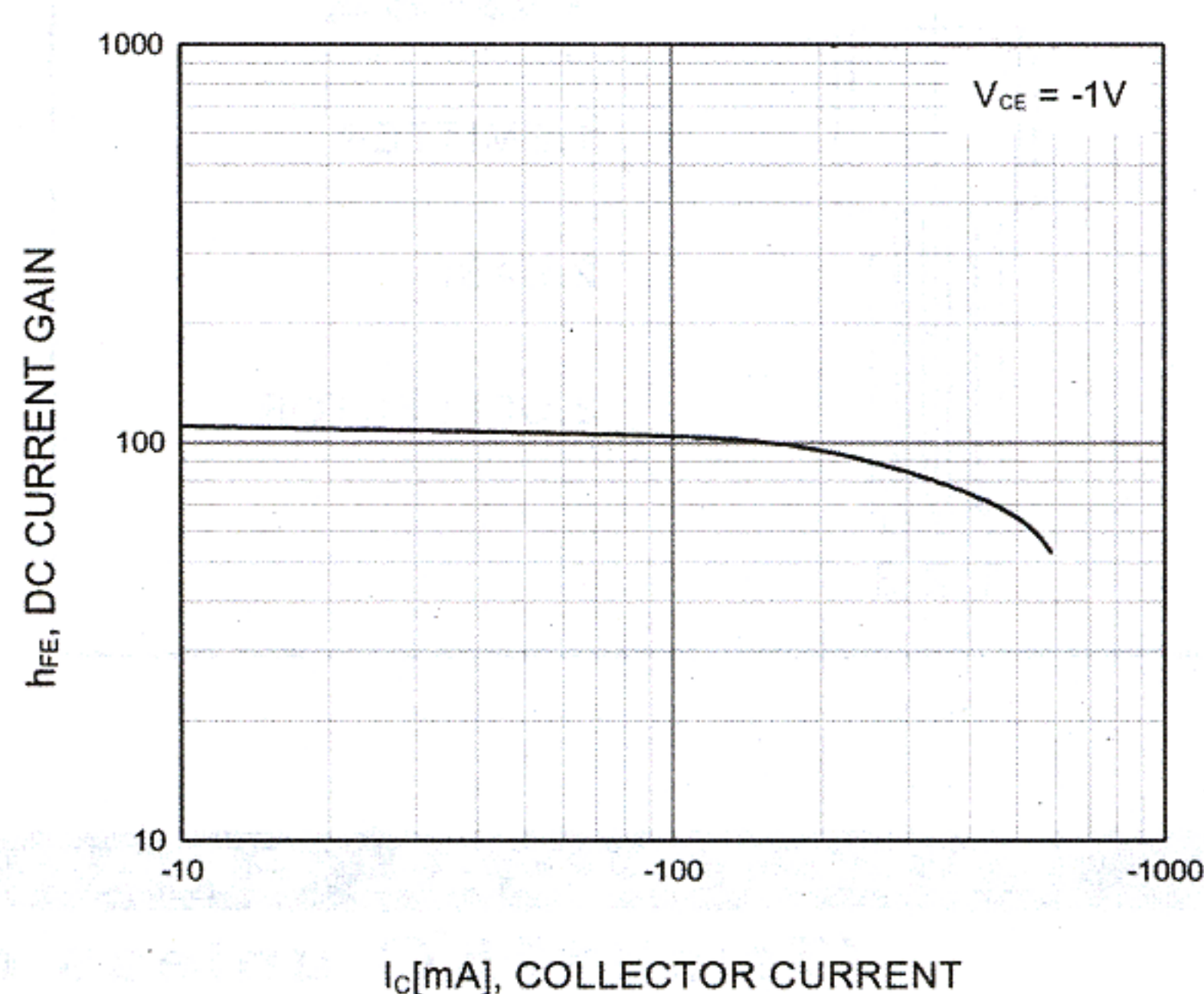
Rank	D	E	F	G	H	I
Range	64-91	78-112	96-135	112-166	144-202	190-300

Typical Characteristics

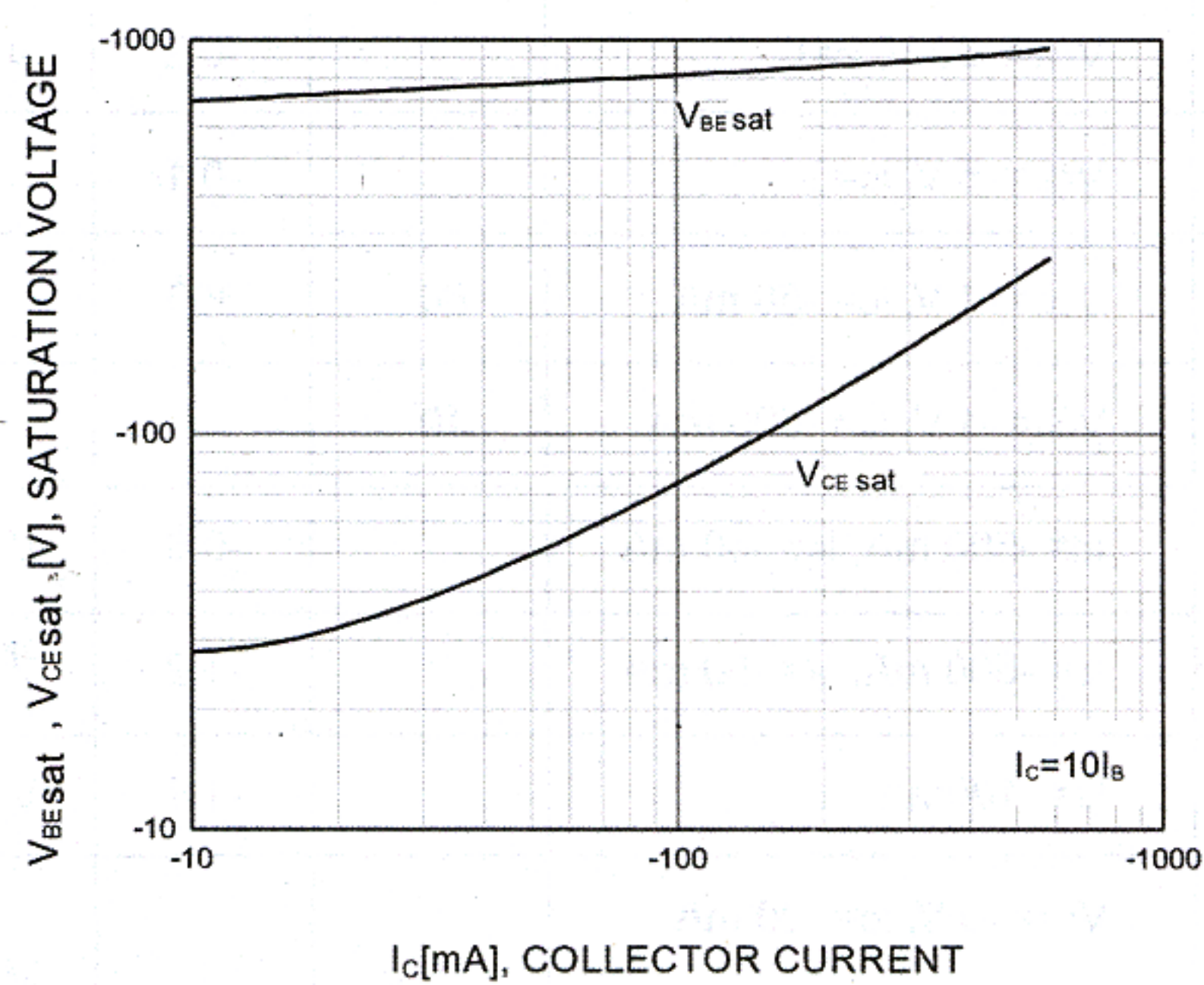
S9012



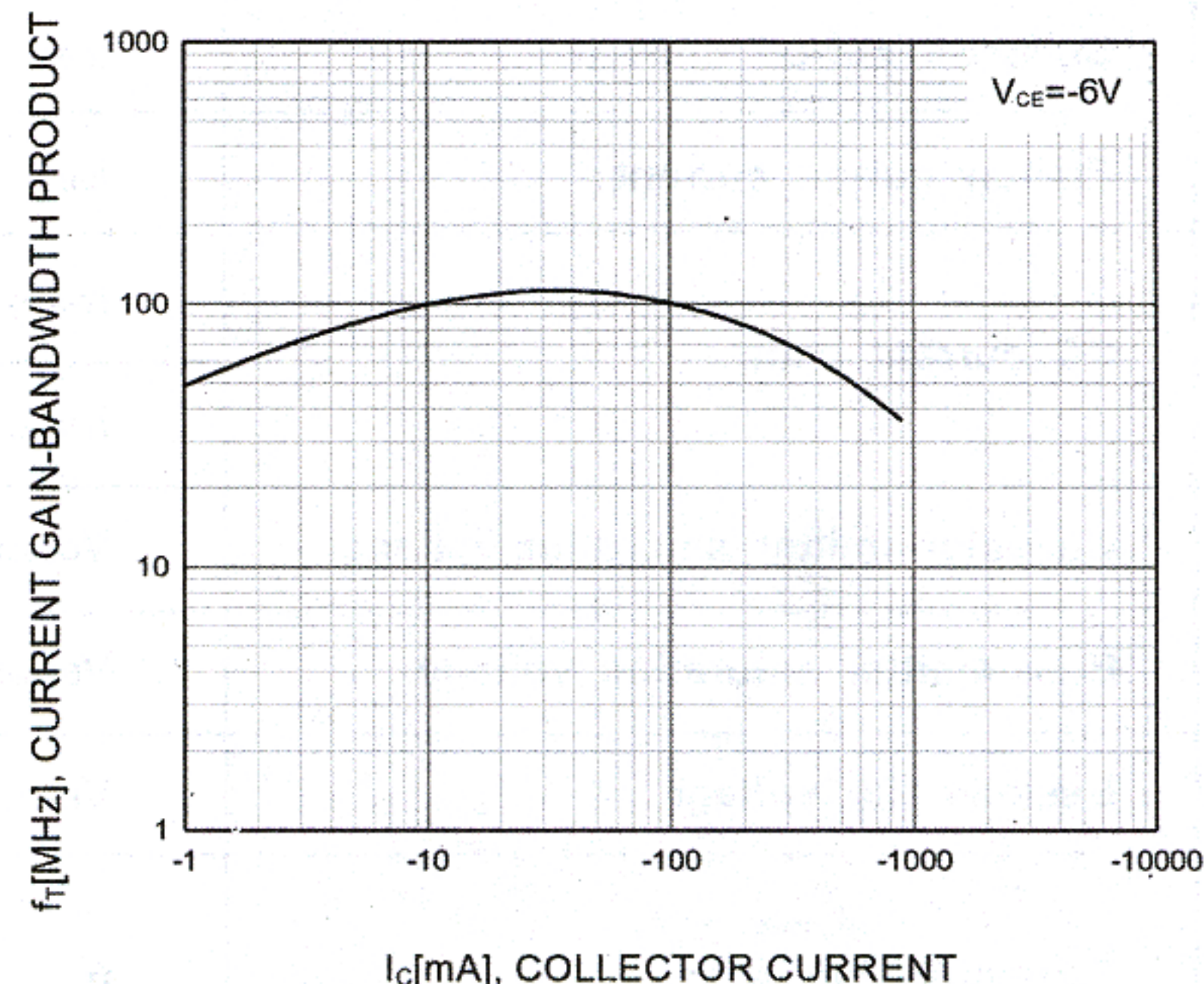
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product