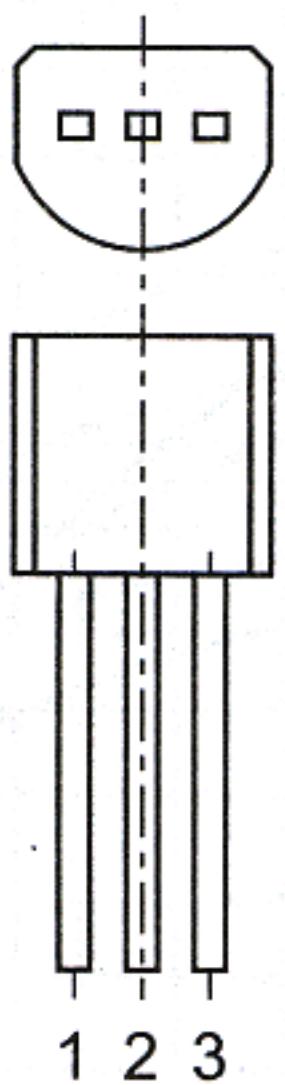


TO-92 Plastic-Encapsulate Transistors

2N4401 TRANSISTOR(NPN)



TO-92

- 1.EMITTER
- 2.BASE
- 3.COLLECTOR

FEATURES

Power dissipation

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

Collector current

I_{CM} : 0.6 A

Collector-base voltage

$V_{(BR)CBO}$: 60V

Operating and storage junction temperature range

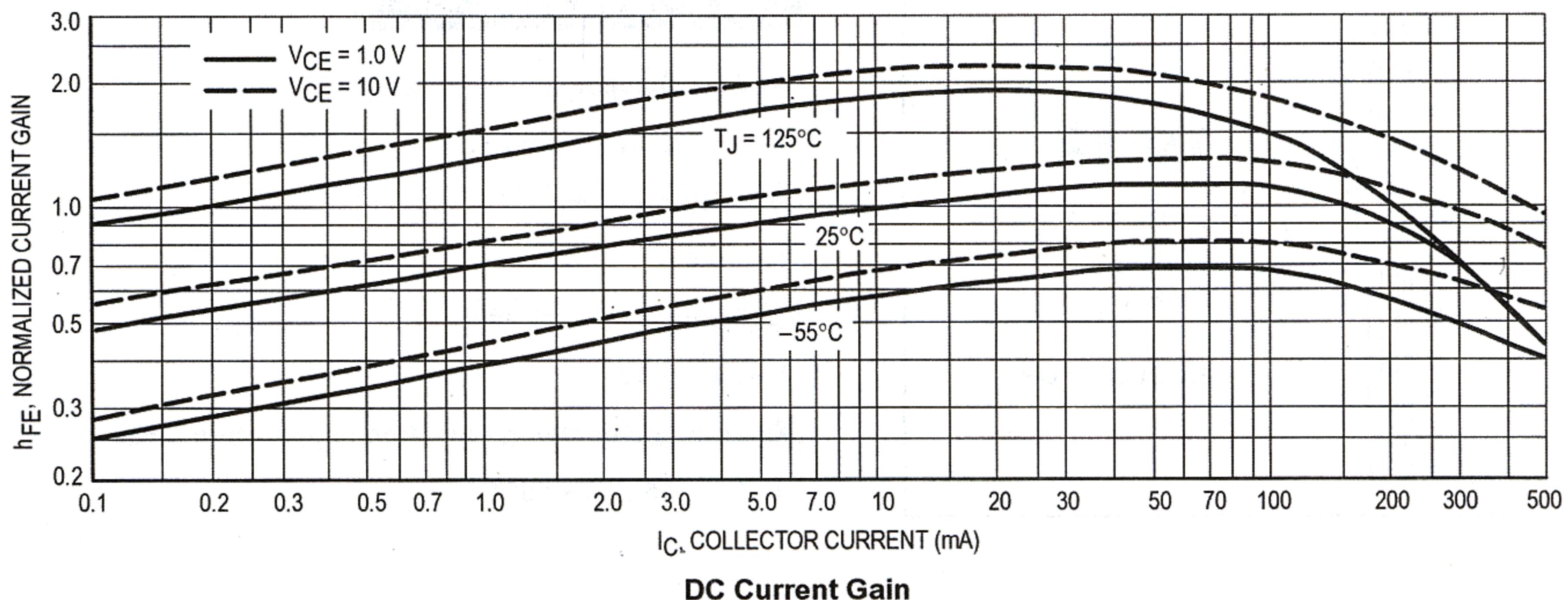
T_J, T_{stg} : -55°C to + 150°C

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

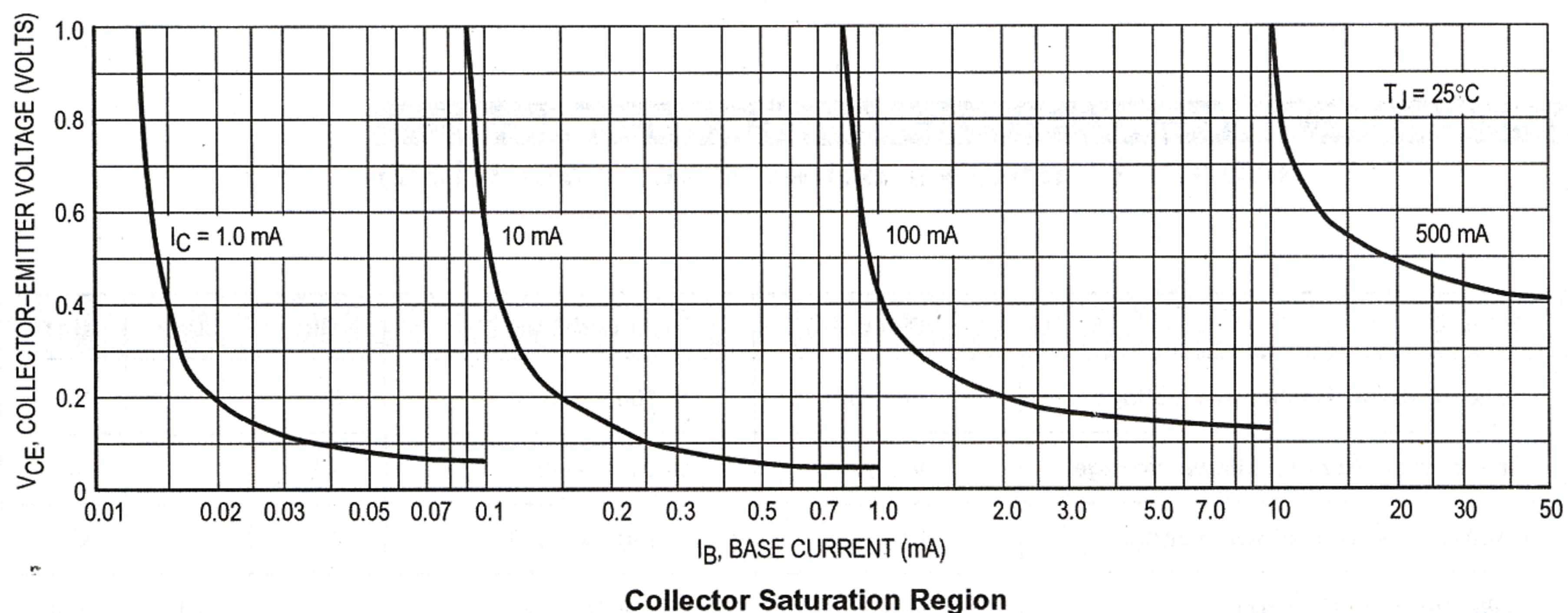
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C= 100 \mu A, I_E=0$	60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C= 1 mA, I_B=0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E= 100 \mu A, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}= 50 V, I_E=0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}= 35 V, I_B=0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= 5 V, I_C=0$		0.1	μA
DC current gain	$h_{FE}(1)$	$V_{CE}= 1 V, I_C= 150 mA$	100	300	
Collector-emitter saturation voltage	V_{CEsat}	$I_C= 150 mA, I_B= 15 mA$		0.4	V
Base-emitter saturation voltage	V_{BEsat}	$I_C= 150 mA, I_B= 15 mA$		0.95	V
Transition frequency	f_T	$V_{CE}= 10 V, I_C= 20 mA$ $f=100MHz$	250		MHz

Typical Characteristics

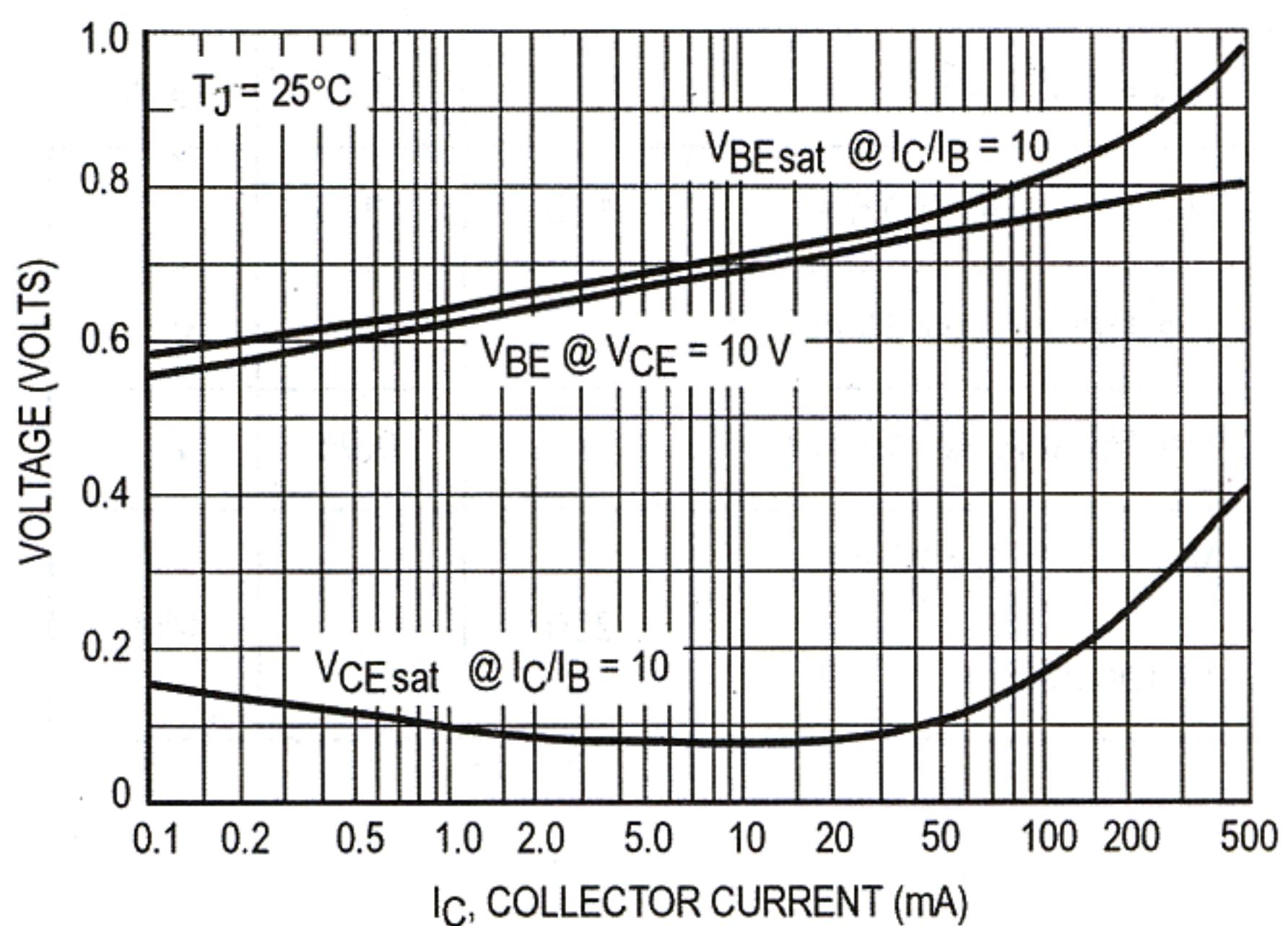
2N4401



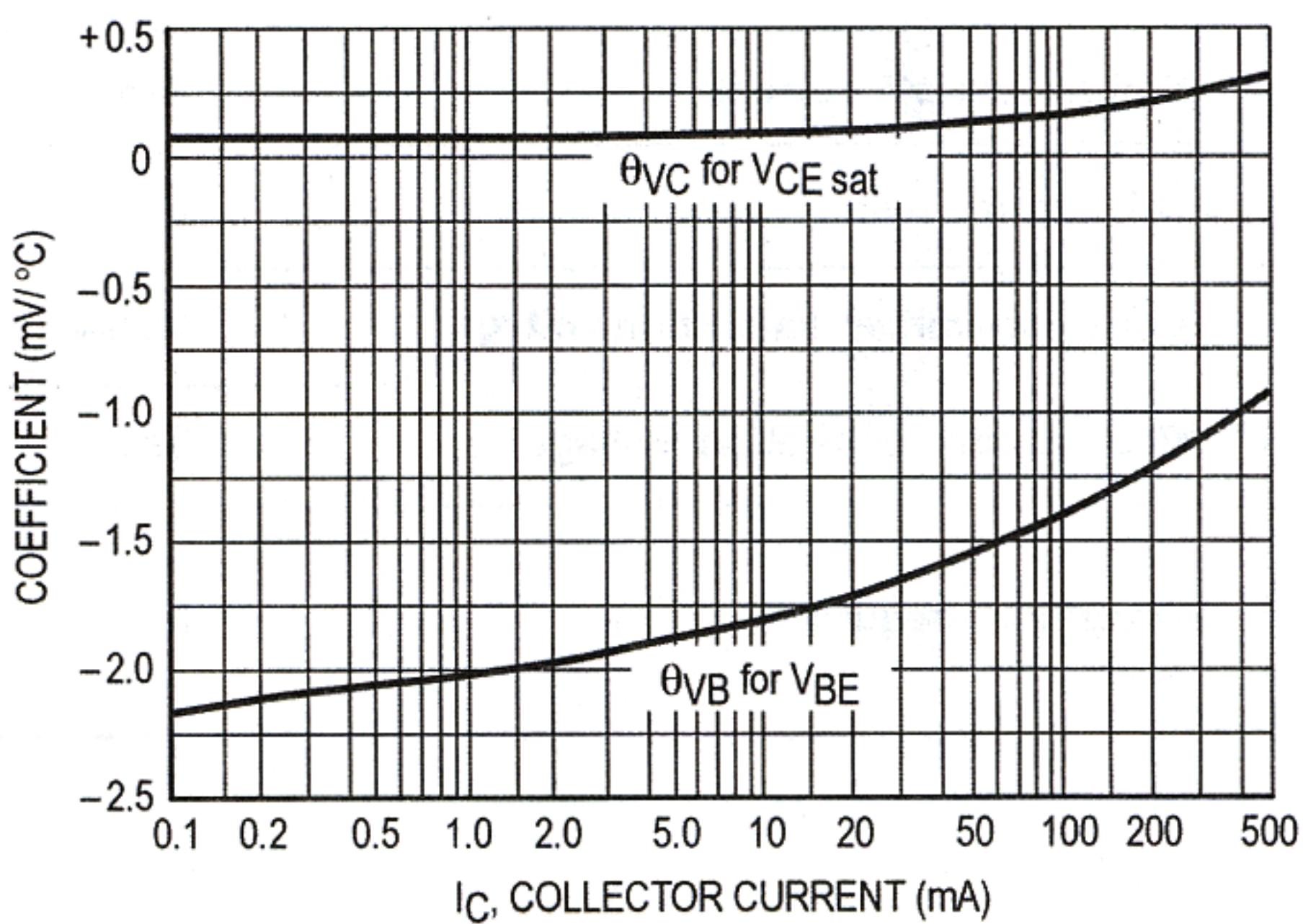
DC Current Gain



Collector Saturation Region



"On" Voltages



Temperature Coefficients