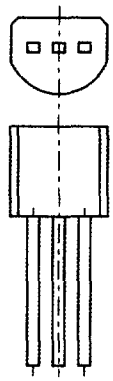
TO-92 Plastic-Encapsulate Transistors

2N5401 TRANSISTOR(PNP)



TO-92

1.EMITTER

2.BASE

3.COLLECTOR

FEATURES

Power dissipation

P_{CM}: 0.625W (Tamb=25℃)

Collector current

I_{CM}: -0.6 A

Collector-base voltage

$V_{(BR)CBO}$: -160 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to + 150℃

ELECTRICAL CHARACTERISTICS

(Tamb=25℃ unless otherwise specified)

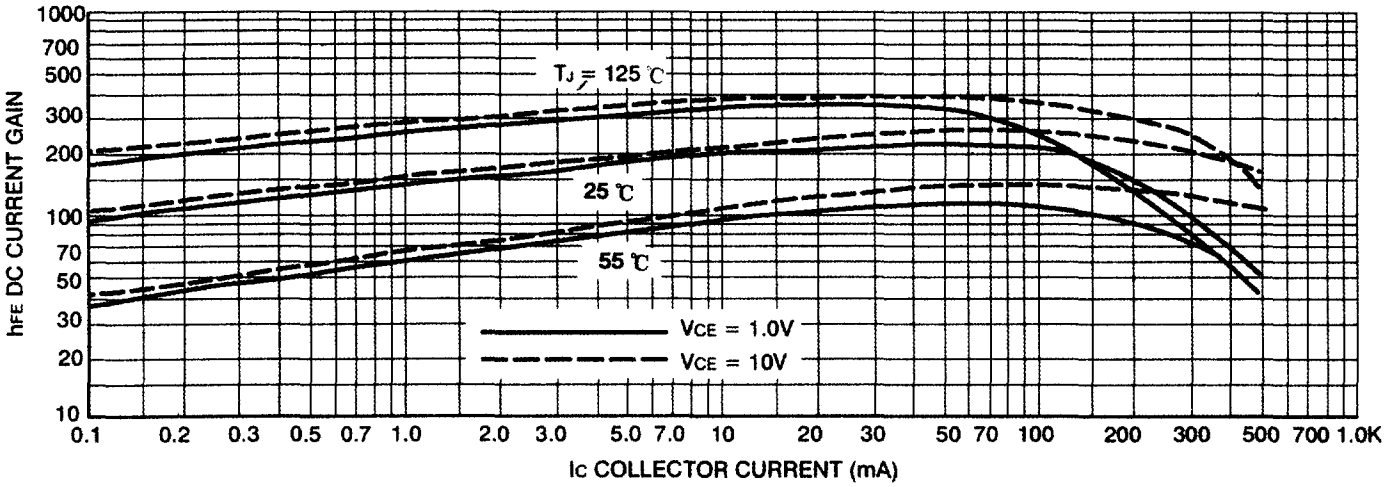
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -100 μ A, I_E=0	-160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -1 mA, I_B=0	-150		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -10 μ A, I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}= -120 V, I_E=0		-0.05	μ A
Emitter cut-off current	I_{EBO}	V_{EB}= -4 V, I_C=0		-0.05	μ A
DC current gain	$h_{FE(1)}$	V_{CE}= -5 V, I_C= -1 mA	80		
	$h_{FE(2)}$	V_{CE}= -5 V, I_C= -10 mA	80	250	
	$h_{FE(3)}$	V_{CE}= -5 V, I_C= -50 mA	50		
Collector-emitter saturation voltage	V_{CEsat}	I_C= -50 mA, I_B= -5 mA		-0.5	V
Base-emitter saturation voltage	V_{BEsat}	I_C= -50 mA, I_B= -5 mA		-1	V
Transition frequency	f_T	V_{CE}= -5 V, I_C= -10 mA f =30MHz	100		MHz

CLASSIFICATION OF $h_{FE(2)}$

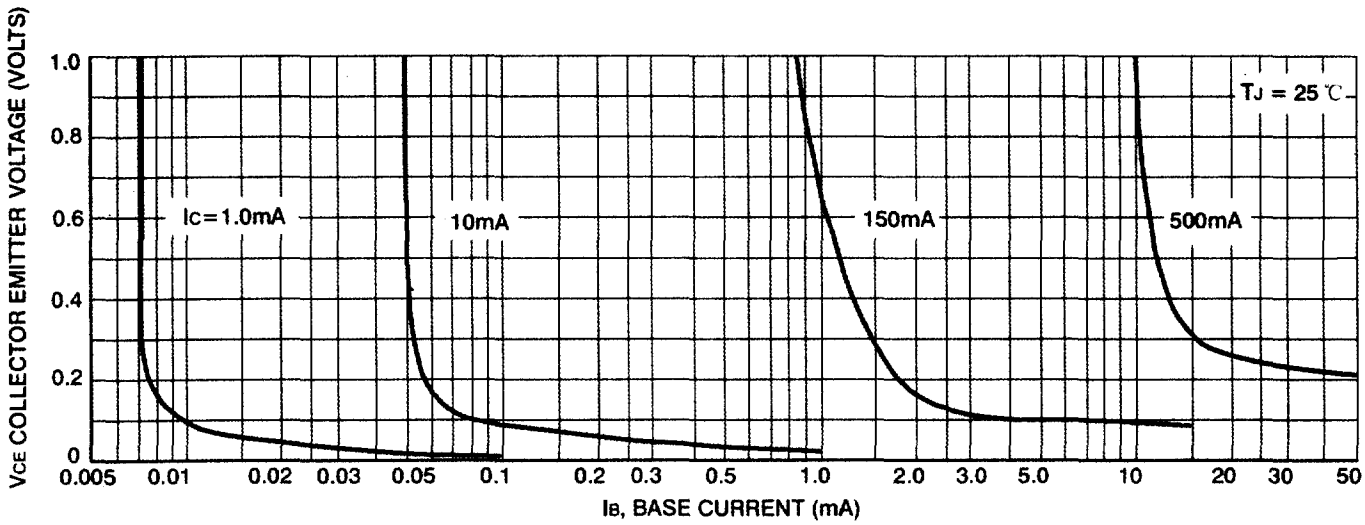
Rank	A	B	C
Range	85-160	120-180	150-250

Typical Characteristics

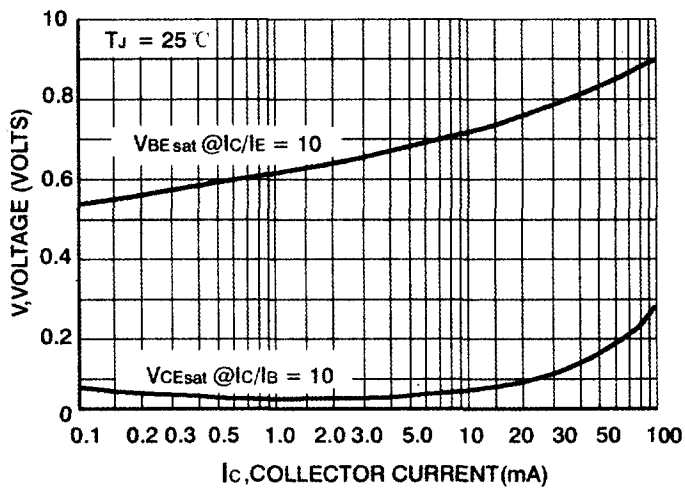
2N5401



DC Current Gain



Collector Saturation Region



"On" Voltages