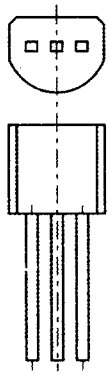
TO-92 Plastic-Encapsulate Transistors

MPS2222A TRANSISTOR(NPN)



TO-92

1.EMITTER

2.BASE

3.COLLECTOR

1 2 3

FEATURES

Power dissipation

P_{CM}: 0.625W (Tamb=25℃)

Collector current

I_{CM}: 0.6 A

Collector-base voltage

$V_{(BR)CBO}$: 75 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to + 150℃

ELECTRICAL CHARACTERISTICS

(Tamb=25℃ unless otherwise specified)

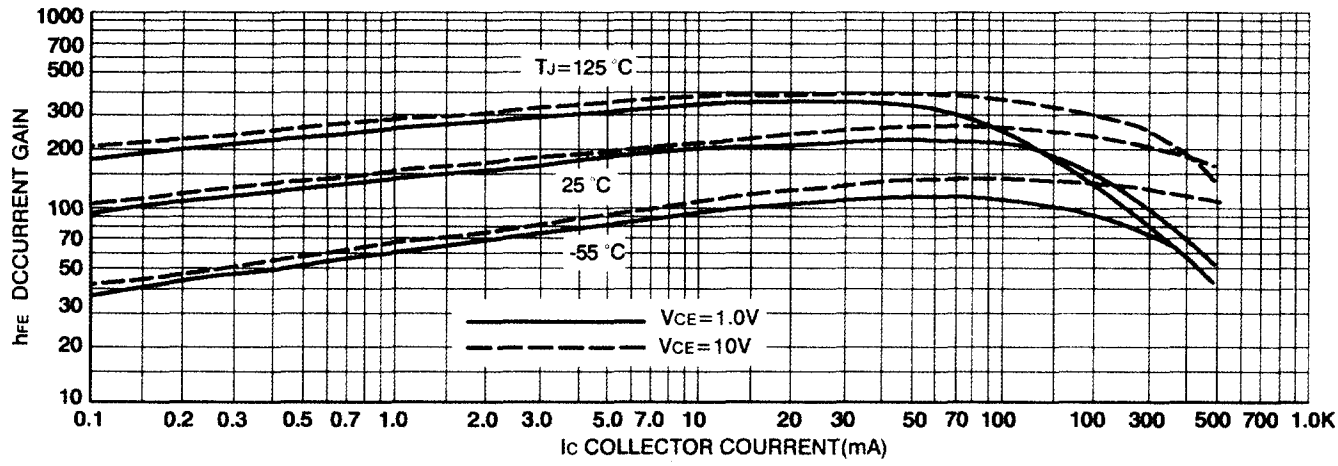
Parameter	Symbol	Test conditions	MIN	MAX	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 10 μ A, I_E=0	75		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10 mA, I_B=0	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 10 μ A, I_C=0	6.5		V
Collector cut-off current	I_{CBO}	V_{CB}= 70 V, I_E=0		0.1	μ A
Collector cut-off current	I_{CEO}	V_{CE}= 35 V, I_B=0		0.1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}= 3 V, I_C=0		0.1	μ A
DC current gain	$h_{FE(1)}$	V_{CE}= 10 V, I_C= 150 mA	100	300	
	$h_{FE(2)}$	V_{CE}= 10 V, I_C= 1 mA	60		
Collector-emitter saturation voltage	V_{CEsat}	I_C= 500 mA, I_B= 50 mA		1	V
Base-emitter saturation voltage	V_{BEsat}	I_C= 500 mA, I_B= 50 mA		2	V
Transition frequency	f_T	V_{CE}= 20 V, I_C= 20 mA f =100MHz	300		MHz

CLASSIFICATION OF $h_{FE(1)}$

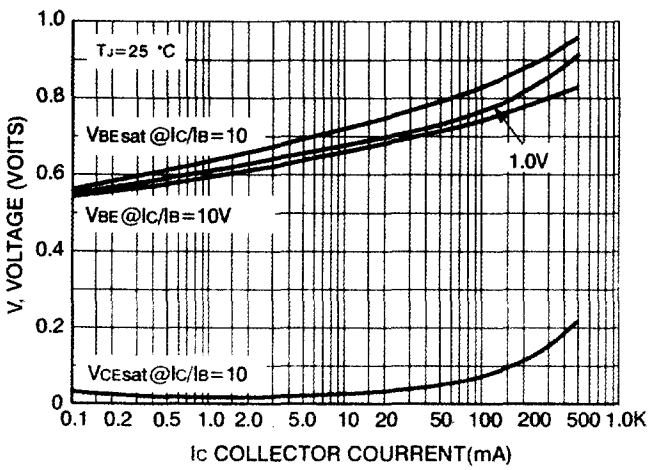
Rank	L	H
Range	100-200	200-300

Typical Characteristics

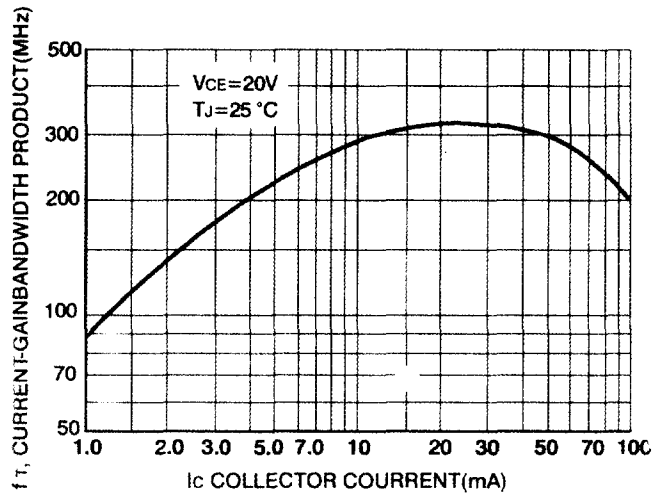
MPS2222A



DC Current Gain



"On" Volages



Current-Gain Bandwidth Product