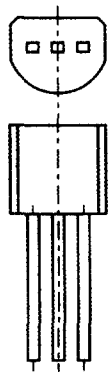
TO-92 Plastic-Encapsulate Transistors

2SC2120 TRANSISTOR(NPN)



TO-92

1.EMITTER

2.COLLECTOR

3.BASE

FEATURES

Power dissipation

P_{CM}: 0.6W (Tamb=25℃)

Collector current

I_{CM}: 0.8 A

Collector-base voltage

$V_{(BR)CBO}$: 35 V

Operating and storage junction temperature range

T_{stg}: -55℃ to + 150℃

T_J: 150℃

ELECTRICAL CHARACTERISTICS

(Tamb=25℃ unless otherwise specified)

Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 0.1mA, I_E=0	35		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10 mA, I_B=0	30		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 0.1mA, I_C=0	5		V
Collector cut-off current	I_{CBO}	V_{CB}= 35 V, I_E=0		0.1	μ A
Collector cut-off current	I_{CEO}	V_{CE}= 25 V, I_B=0		0.1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}= 5 V, I_C=0		0.1	μ A
DC current gain	h_{FE}	V_{CE}= 1 V, I_C= 100 mA	100	320	
Collector-emitter saturation voltage	V_{CEsat}	I_C= 500 mA, I_B= 20 mA		0.5	V
Base-emitter voltage	V_{BE}	V_{CE}= 1 V, I_C= 10 mA		0.8	V
Transition frequency	f_T	V_{CE}= 5 V, I_C= 10 mA	100		MHz

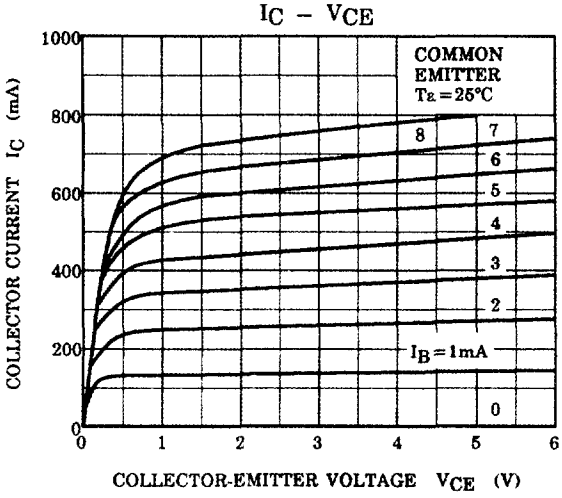
CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320

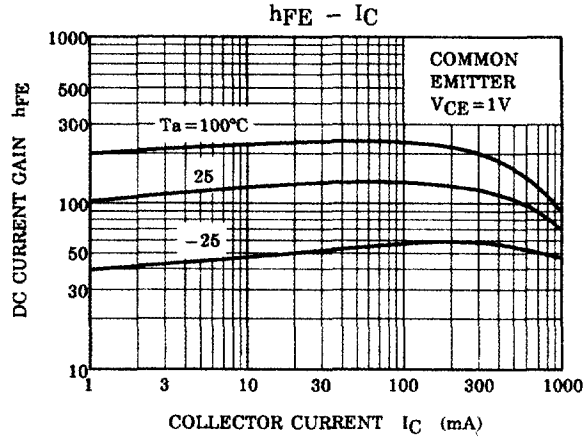
Typical Characteristics

2SC2120

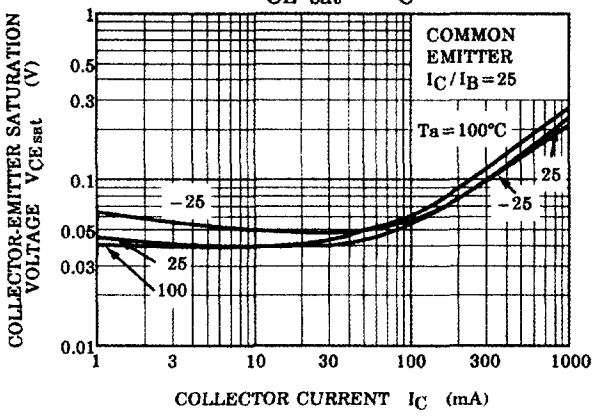
$I_C - V_{CE}$



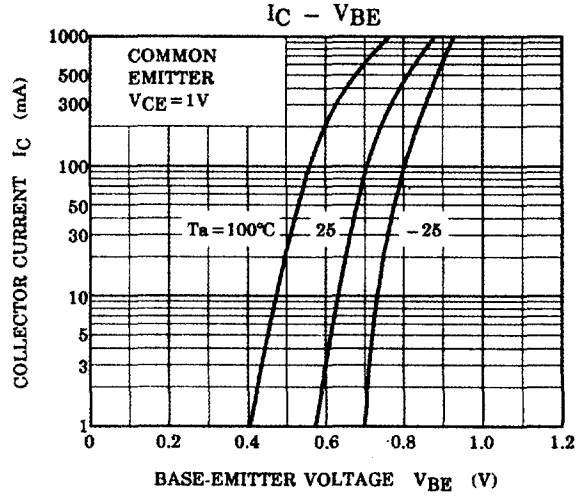
$h_{FE} - I_C$



$V_{CE\ sat} - I_C$



$I_C - V_{BE}$



$P_C - Ta$