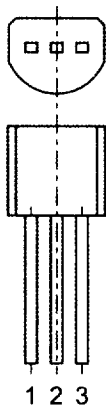
TO-92 Plastic-Encapsulate Transistors

2SA1300 TRANSISTOR(PNP)



TO-92

1.EMITTER

2.COLLECTOR

3.BASE

FEATURES

[redacted]

P_{CM}: 0.75W (Tamb=25℃)

[redacted]

I_{CM}: -2 A

[redacted]

$V_{(BR)CBO}$: -20 V

[redacted] **junction temperature range**

T_{stg}: -55℃ to + 150℃

T_J: 150℃

ELECTRICAL CHARACTERISTICS

(Tamb=25℃ unless otherwise specified)

[redacted]					
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -1 mA, I_E=0	-20		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -10 mA, I_B=0	-10		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -1 mA, I_C=0	-6		V
Collector cut-off current	I_{CBO}	V_{CB}= -20 V, I_E=0		-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -6 V, I_C=0		-0.1	μA
DC current gain	h_{FE}	V_{CE}= -1 V, I_C= -0.5 A	140	600	
Collector-emitter saturation voltage	V_{CEsat}	I_C= -2 A, I_B= -50 mA		-0.5	V
Base-emitter voltage	V_{BE}	V_{CE}= -1 V, I_C= -2 A		-1.5	V
Transition frequency	f_T	V_{CE}= -1 V, I_C= -0.5 A f =30MHz	100		MHz

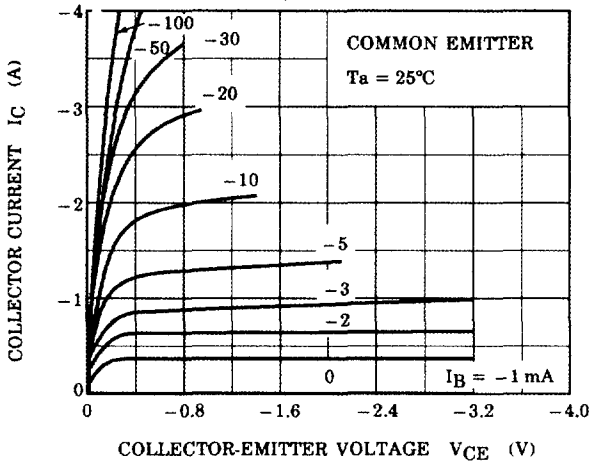
CLASSIFICATION OF h_{FE}

Rank	Y	GR	BL
Range	140-280	200-400	300-600

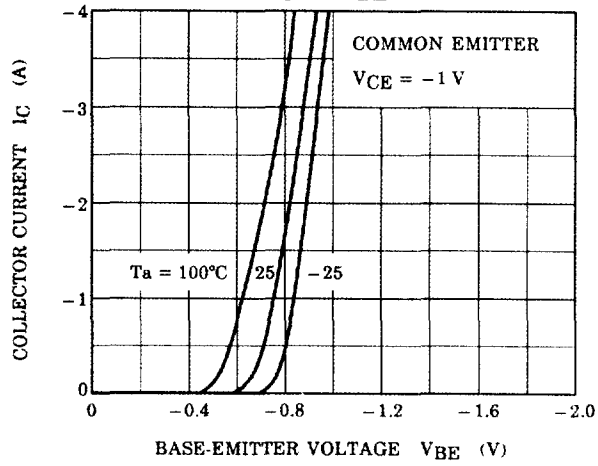
Typical Characteristics

2SA1300

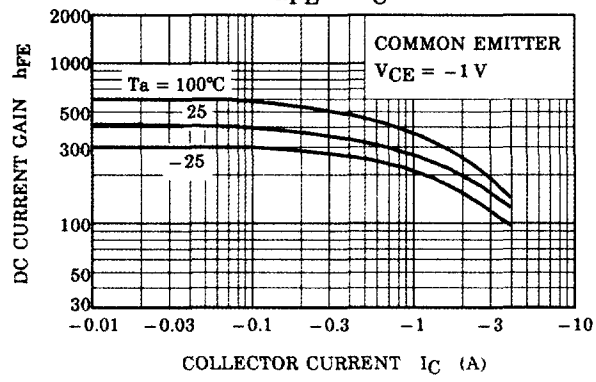
I_C – V_{CE}



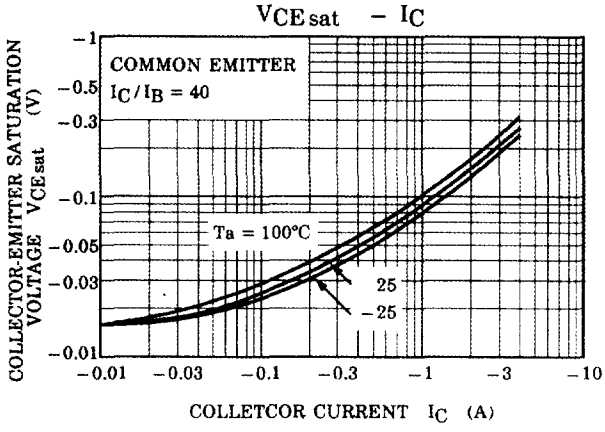
I_C – V_{BE}



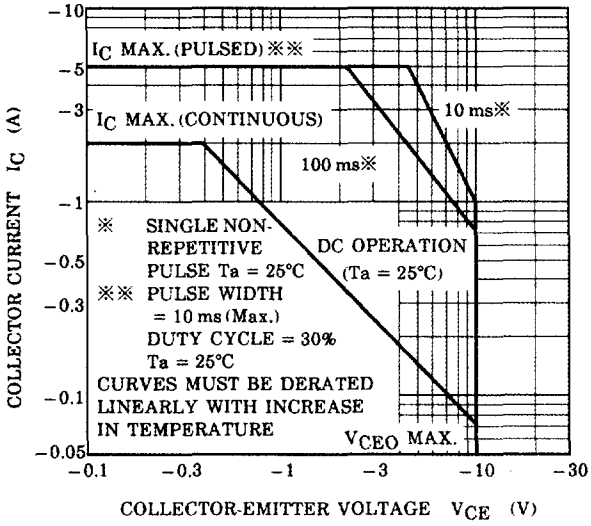
h_{FE} – I_C



$V_{CE\,sat}$ – I_C



SAFE OPERATING AREA



P_C – Ta