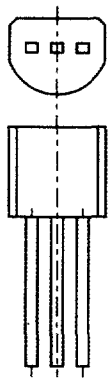
TO-92 Plastic-Encapsulate Transistors

KTC3198 TRANSISTOR(NPN)



TO-92

1.EMITTER

2.COLLECTOR

3.BASE

FEATURES

Power dissipation

P_{CM}: 0.625W (Tamb=25℃)

Collector current

I_{CM}: 0.15 A

Collector-base voltage

$V_{(BR)CBO}$: 60 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	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 1 mA, I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100 μ A, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}= 60 V, I_E=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	$h_{FE(1)}$	V_{CE}= 6 V, I_C= 2 mA	70		700	
	$h_{FE(2)}$	V_{CE}= 6 V, I_C= 150 mA	25	100		
Collector-emitter saturation voltage	V_{CEsat}	I_C= 100 mA, I_B= 10 mA		0.1	0.25	V
Base-emitter saturation voltage	V_{BEsat}	I_C= 100 mA, I_B= 10 mA			1	V
Transition frequency	f_T	V_{CE}= 10 V, I_C= 1 mA f =30MHz	80			MHz

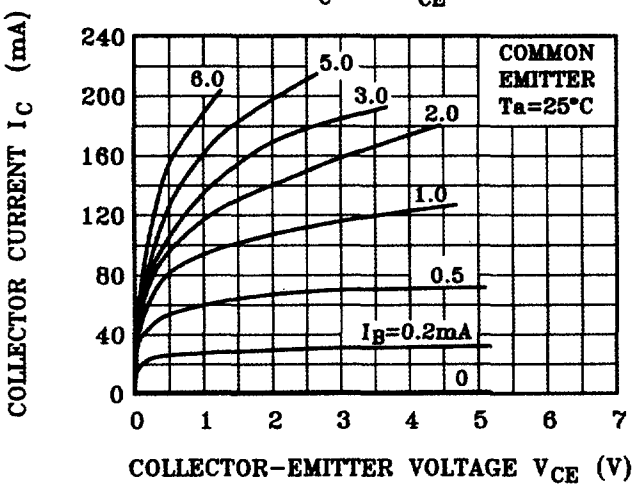
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

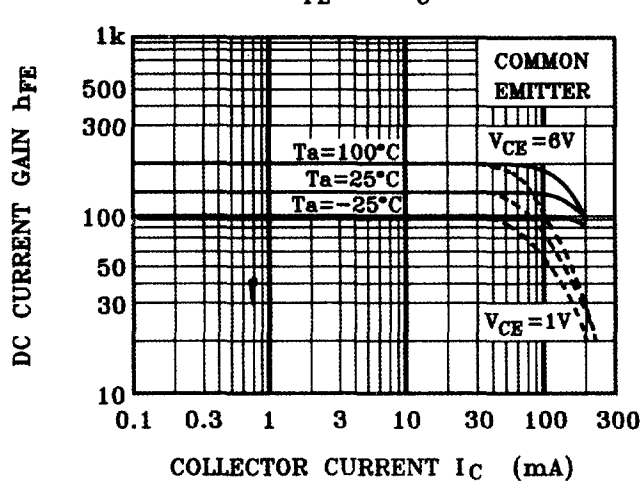
Typical Characteristics

KTC3198

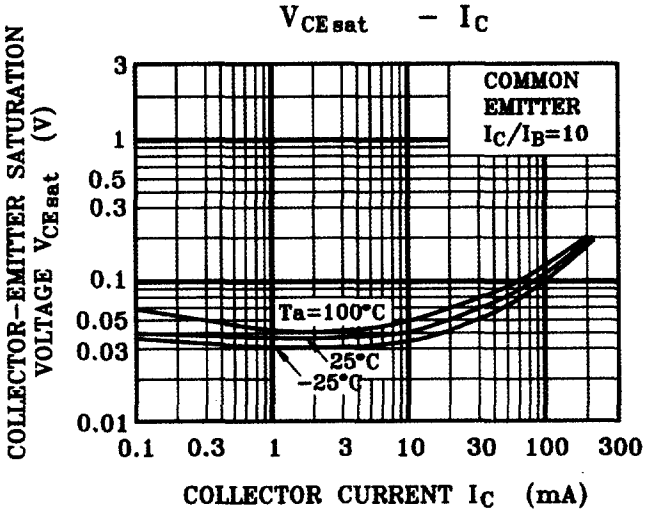
$I_C - V_{CE}$



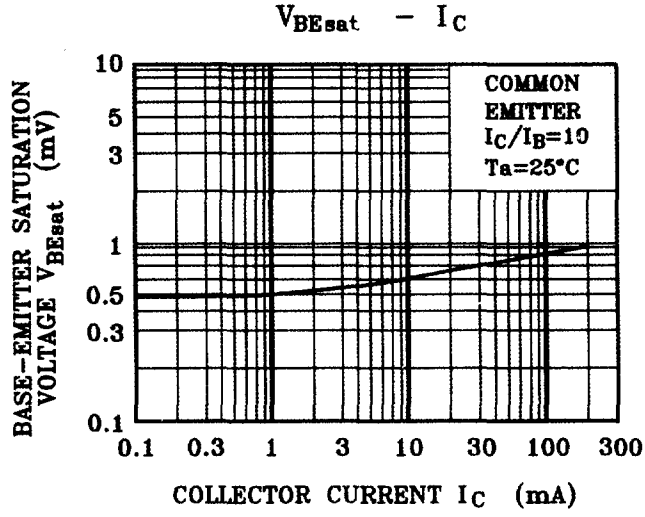
$h_{FE} - I_C$



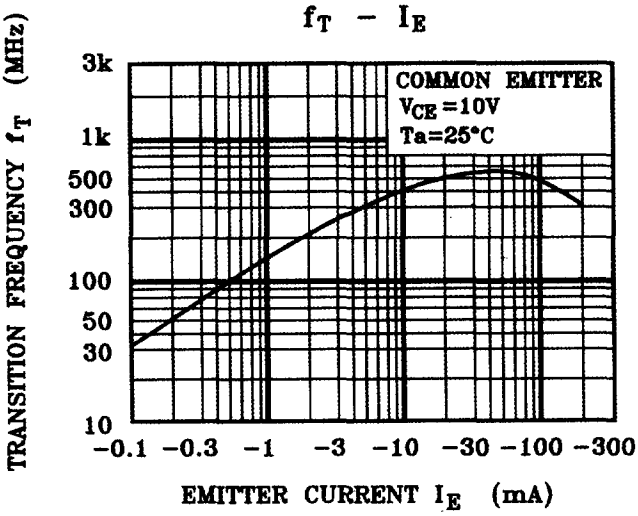
$V_{CE\,sat} - I_C$



$V_{BE\,sat} - I_C$



$f_T - I_E$



$I_B - V_{BE}$