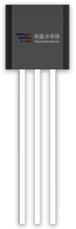
A92 TRANSISTOR (PNP)

FEATURES

- High voltage



TO-92

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
A92	TO-92	Bulk	1000pcs/Bag
A92-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-310	V
V_{CEO}	Collector-Emitter Voltage	-305	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-200	mA
I_{CM}	Collector Current - Pulsed	-500	mA
P_C	Collector Power Dissipation	625	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~150	℃
$R_{\theta JA}$	Thermal Resistance,Junction to Ambient	200	℃ /mW
$R_{\theta JC}$	Thermal Resistance,Junction to Case	83.3	℃ /mW

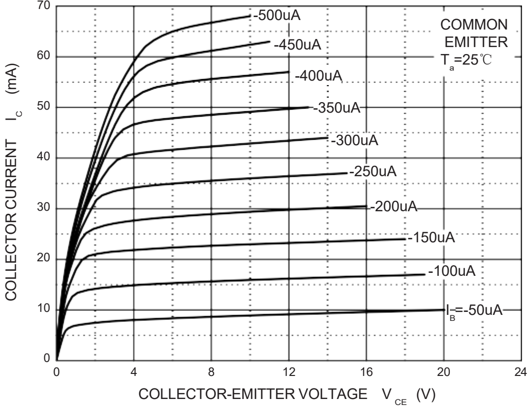
T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100uA, I_E=0	-310			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-305			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -200 V I_E=0			-0.25	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5 V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}= -10 V, IC=- 1 mA	60			
	$h_{FE(2)}$	V_{CE}= -10V, I_C = -10 mA	80		250	
	$h_{FE(3)}$	V_{CE}= -10 V, I_C= -80 mA	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= -20 mA, IB= -2 mA			-0.2	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C= -20 mA, IB= -2 mA			-0.9	V
Transition frequency	f_T	V_{CE}= -20 V, IC= -10 mA f = 30MHz	50			MHz

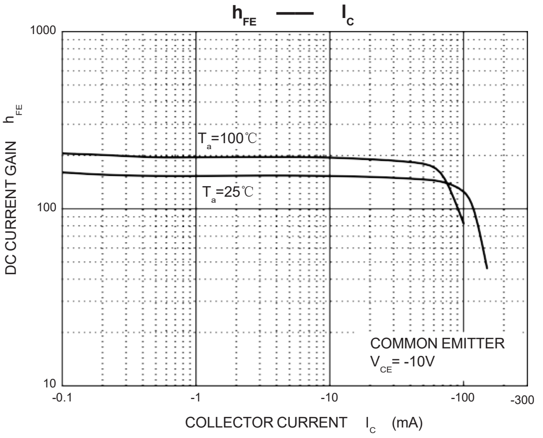
CLASSIFICATION OF $h_{FE(2)}$

Rank	A	B	C
Range	80-100	100-200	200-250

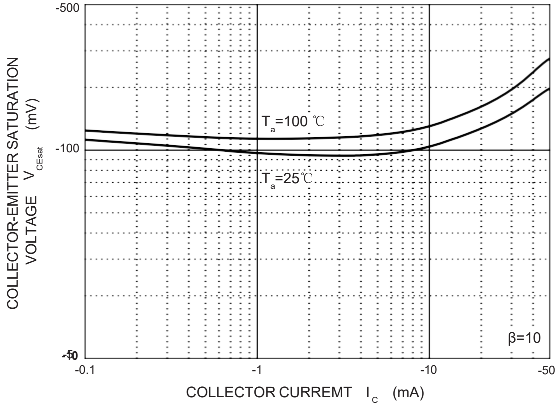
I_C — V_{CE}



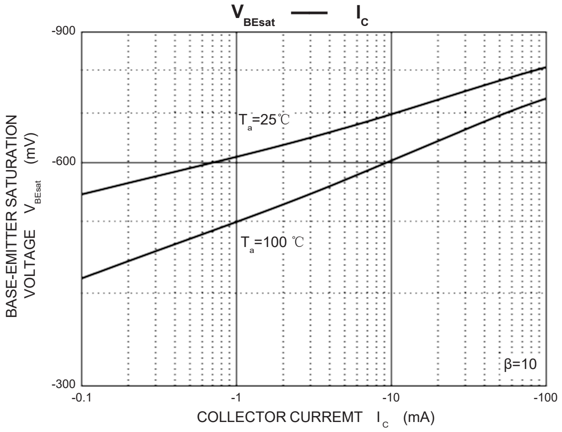
h_{FE} — I_C



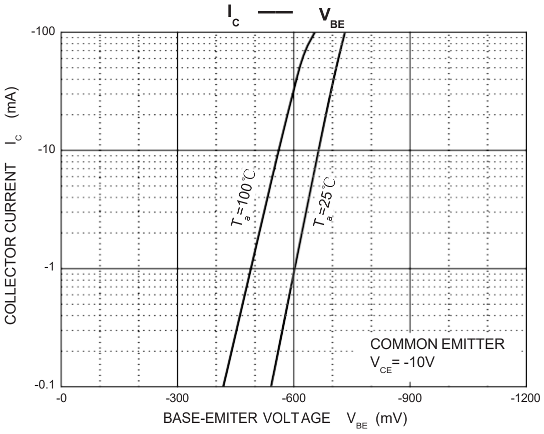
V_{CEsat} — I_C



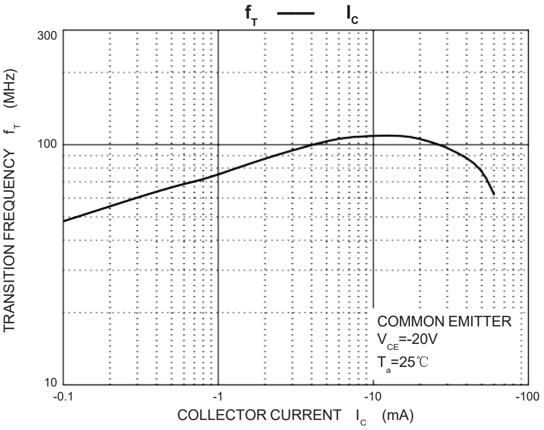
V_{BEsat} — I_C



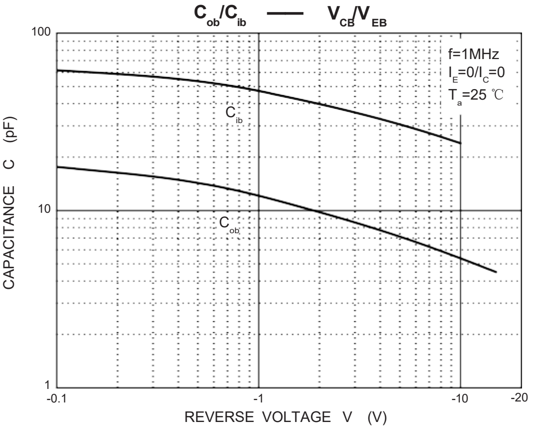
I_C — V_{BE}



f_T — I_C



C_{ob}/C_{ib} — V_{CB}/V_{EB}



P_C — T_a