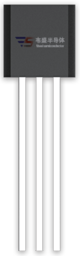
D882S TRANSISTOR (NPN)

FEATURES

- Power dissipation



1.EMITTER
2.COLLECTOR
3.BASE

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
D882S	TO-92	Bulk	1000pcs/Bag
D882S-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

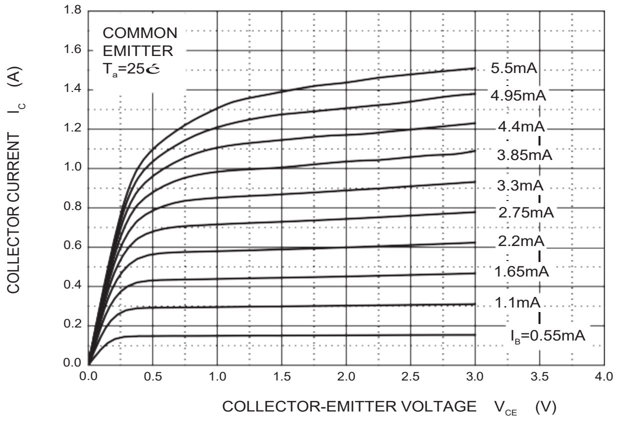
T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 100μA, I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 10mA, I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA, I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}= 40V, I_E=0			1	μA
Collector cut-off current	I_{CEO}	V_{CE}= 30V, I_B=0			10	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 6V, I_C=0			1	μA
DC current gain	h_{FE}	V_{CE}=2V, I_C= 1A	60		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 2A, I_B= 0.2 A			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 2A, I_B= 0.2 A			1.5	V
Transition frequency	f_T	V_{CE}= 5V , Ic=0.1A f =10MHz	50	80		MHz

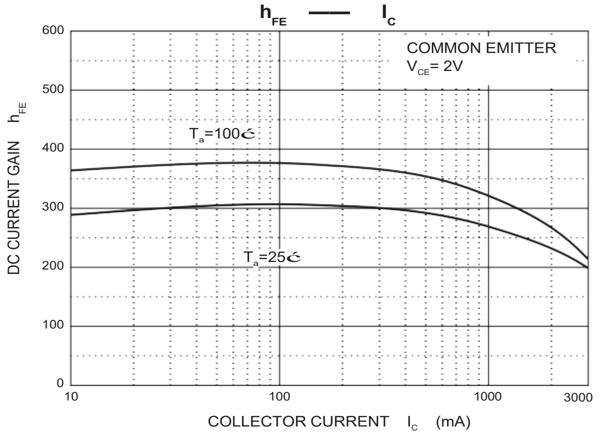
CLASSIFICATION OF h_{FE}

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

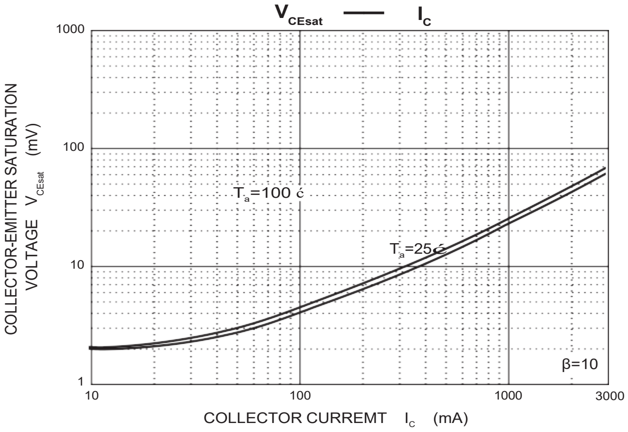
Static Characteristic



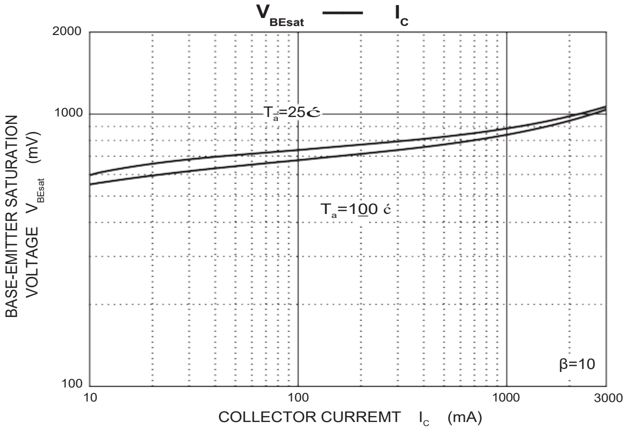
h_{FE} —— I_C



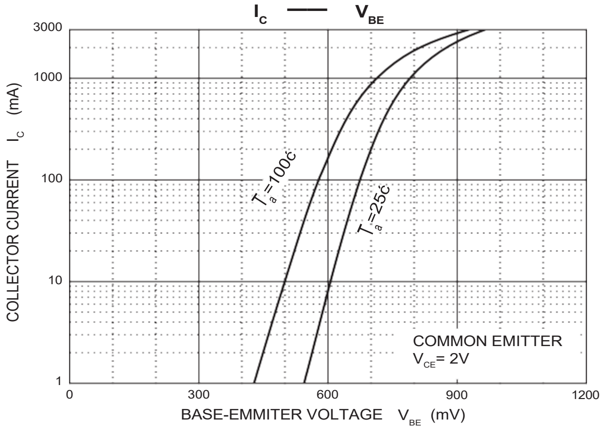
V_{CEsat} —— I_C



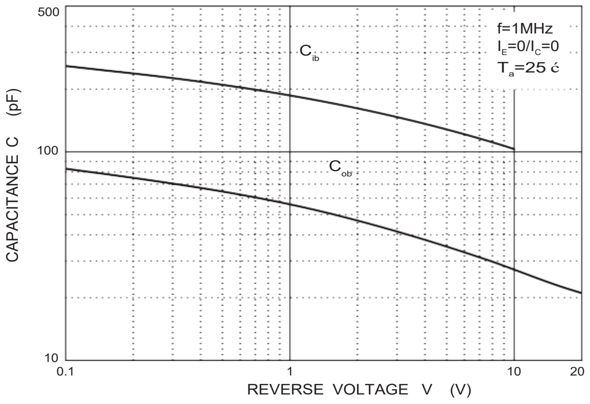
V_{BEsat} —— I_C



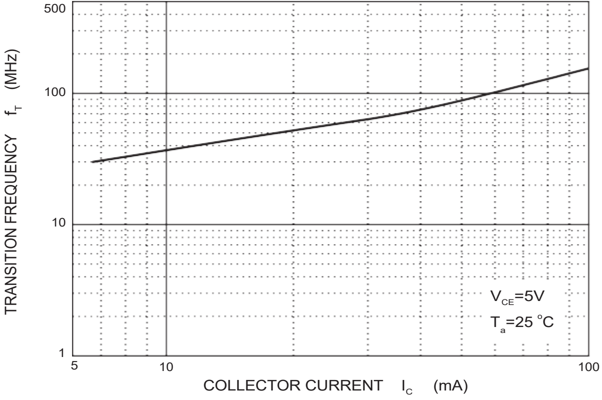
I_C —— V_{BE}



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



f_T —— I_C



P_C —— T_a