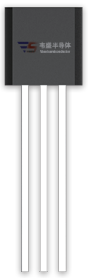
MPSA06

TRANSISTOR (NPN)



TO-92

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- Power amplifier

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
MPSA06	TO-92	Bulk	1000pcs/Bag
MPSA06-TA	TO-92	Tape	2000pcs/Box

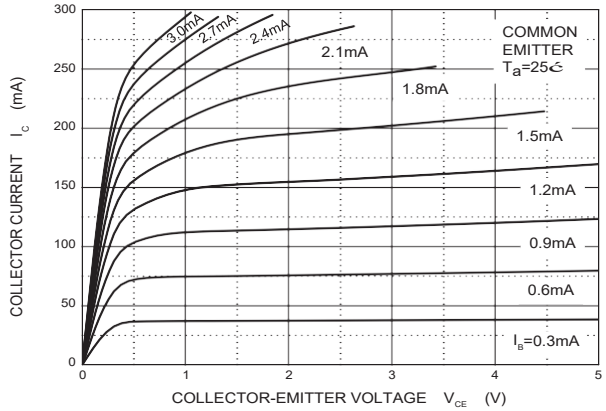
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	0.5	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	℃

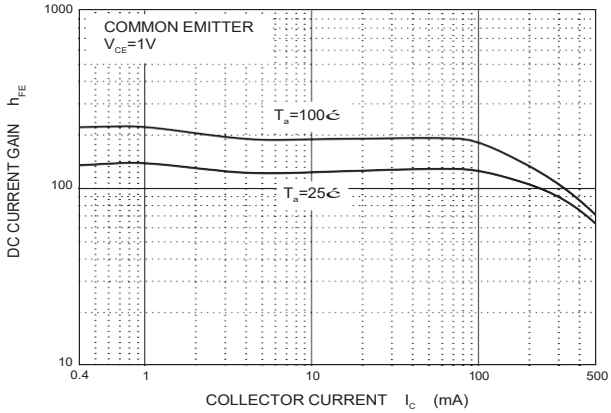
T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	80		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 1mA , I_B=0	80		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	4		V
Collector cut-off current	I_{CBO}	V_{CB}=80V, I_E=0		0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=60V, I_B=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=3V, I_C=0		0.1	μA
DC current gain	h_{FE1}	V_{CE}=1V, I_C= 100mA	100	400	
	h_{FE2}	V_{CE}=1V, I_C= 10mA	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA		0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 100mA, I_B=10mA		1.2	V
Transition frequency	f_T	V_{CE}=2V, I_C= 10mA f = 100MHz	100		MHz

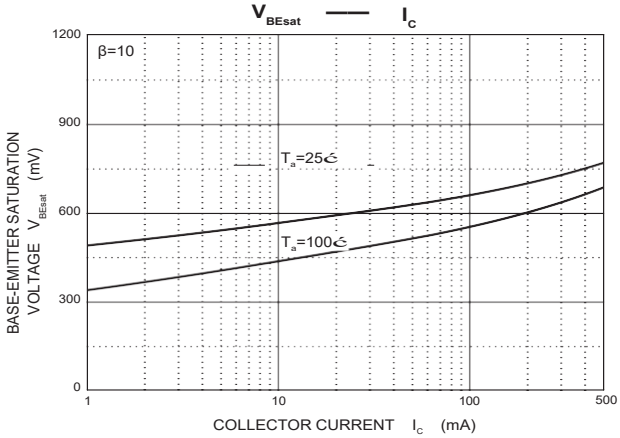
Static Characteristic



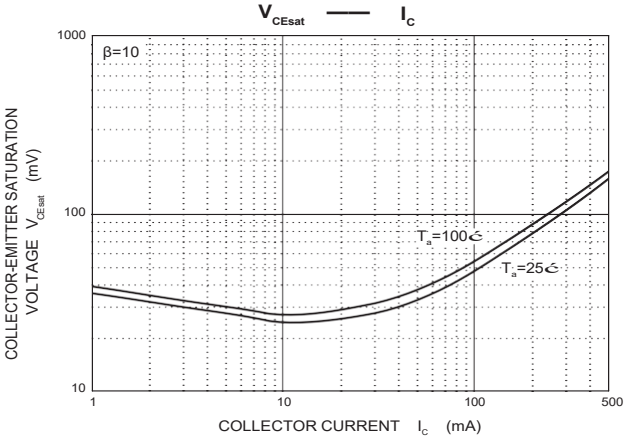
h_{FE} —— I_C



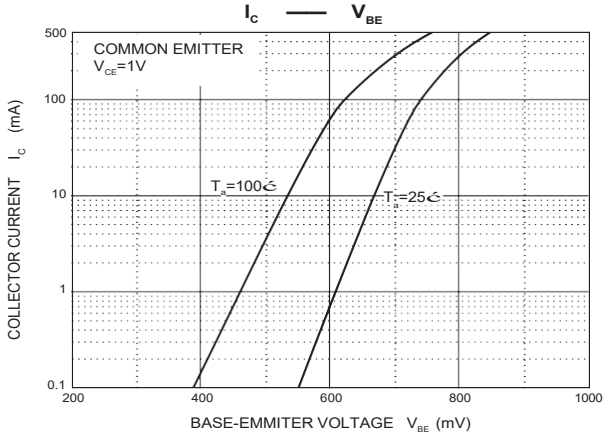
V_{BEsat} —— I_C



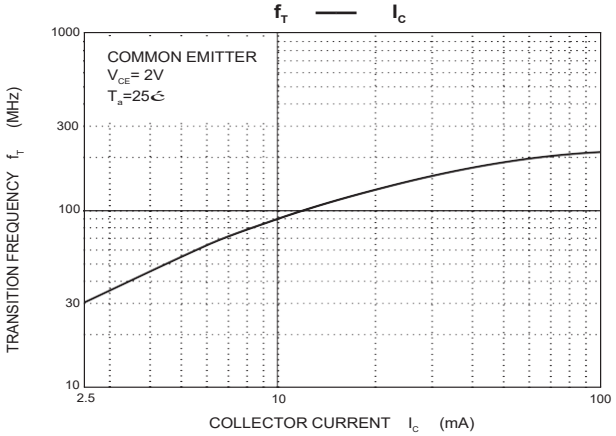
V_{CEsat} —— I_C



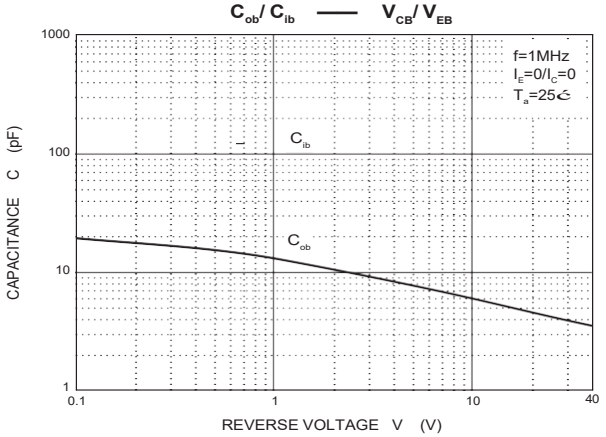
I_C —— V_{BE}



f_T —— I_C



C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



P_C —— T_a