JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

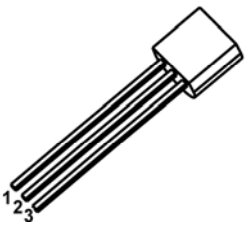
TO-92 Plastic-Encapsulate Transistors

TO – 92

1.EMITTER

2.BASE

3.COLLECTOR



MPSA56 TRANSISTOR (PNP)

FEATURES

- General Purpose Switching and Amplification.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

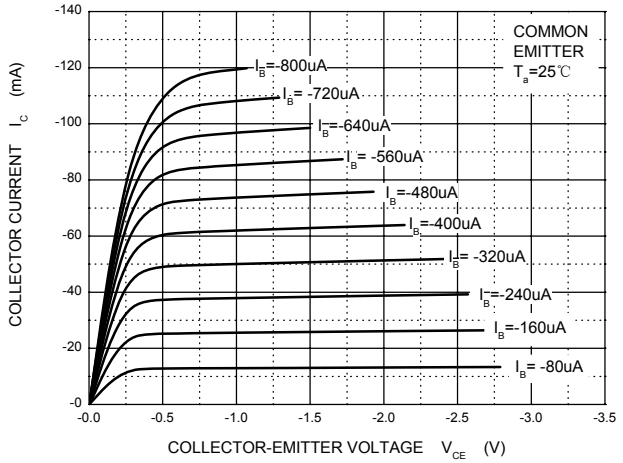
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current	-0.5	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

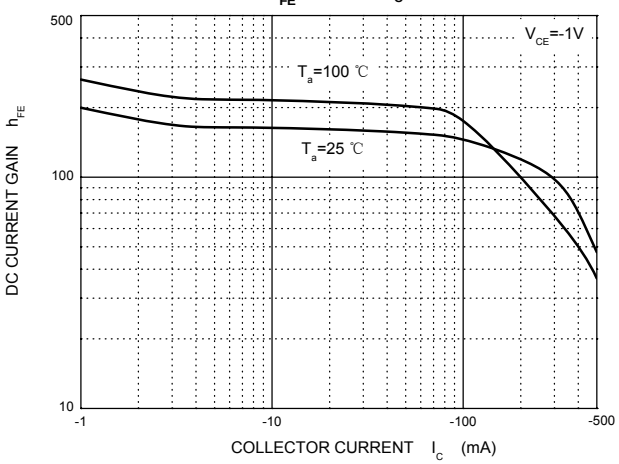
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -0.1mA,I_E=0	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.1mA,I_C=0	-4			V
Collector cut-off current	I_{CBO}	V_{CB}=-80V,I_E=0			-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}=-4V,I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-10mA	100			
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-100mA	100			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-10mA			-0.25	V
Base-emitter voltage	V_{BE}	I_C=-100mA, V_{CE}=-1V			-1.2	V
Transition frequency	f_T	V_{CE}=-1V,I_C=-100mA,f=100MHz	50			MHz

Typical Characterisitics MPSA56

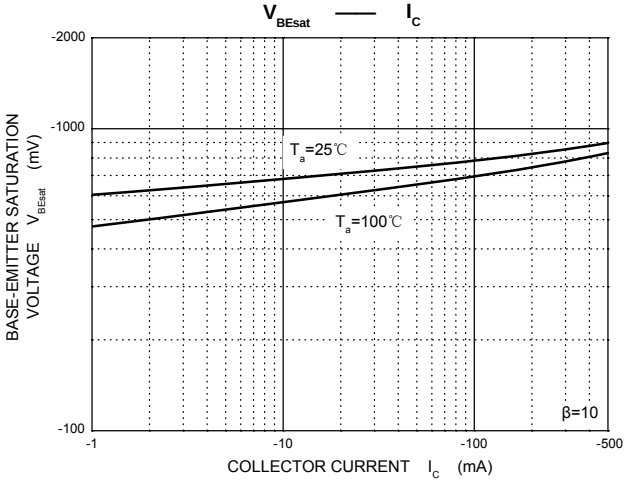
Static Characteristic



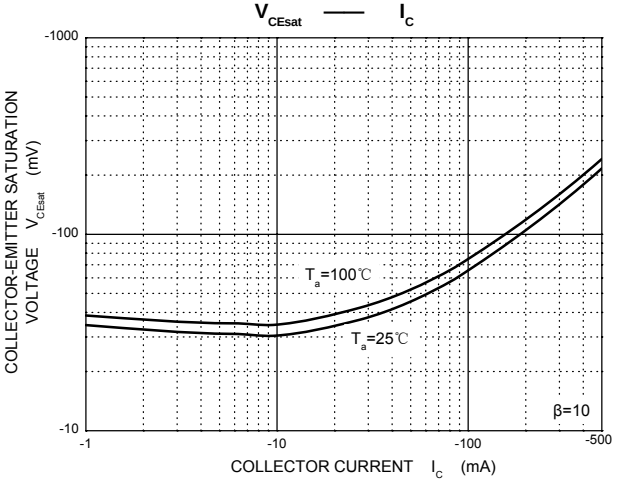
h_{FE} —— I_C



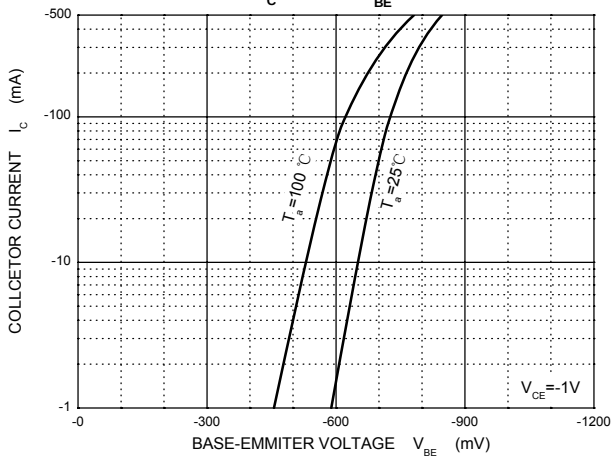
V_{BEsat} —— I_C



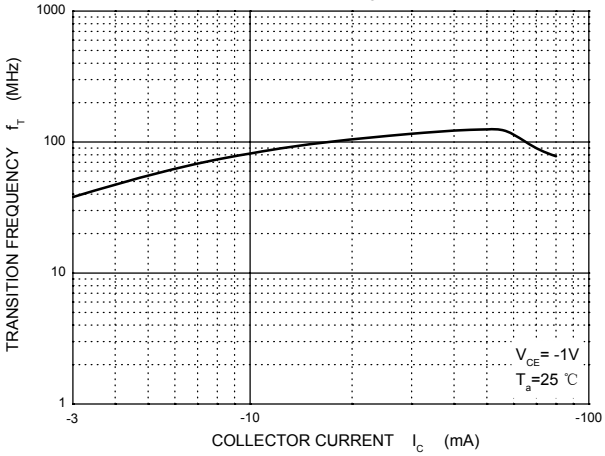
V_{CEsat} —— I_C



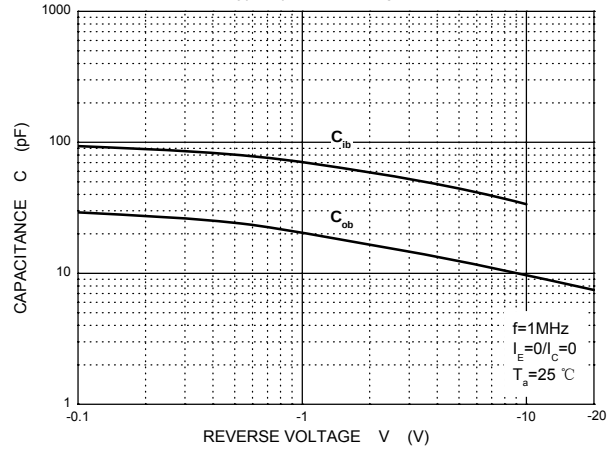
I_C —— V_{BE}



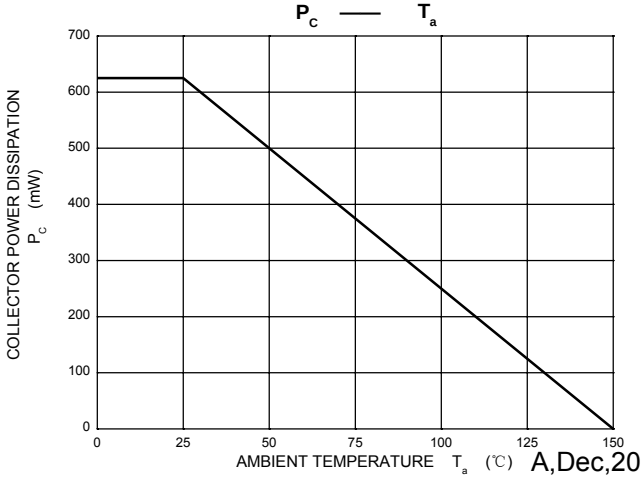
f_T —— I_C



C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



P_C —— T_a



A,Dec,2010