



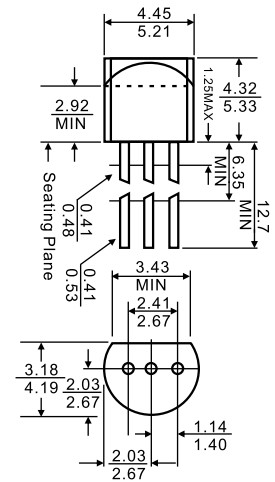
MPSA06

TO-92 Transistor (NPN)



- 1. EMITTER
- 2. BASE
- 3. COLLECTOR

TO-92



Dimensions in inches and (millimeters)

Features

- ✧ Power amplifier

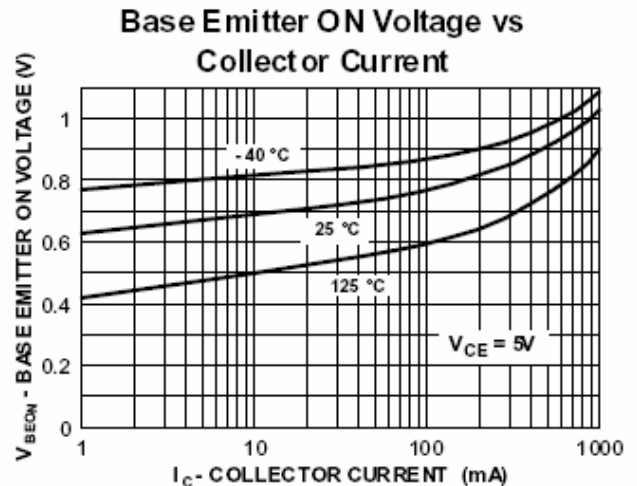
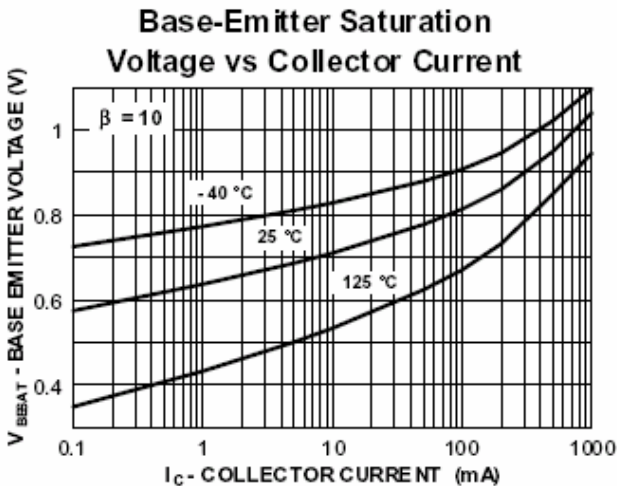
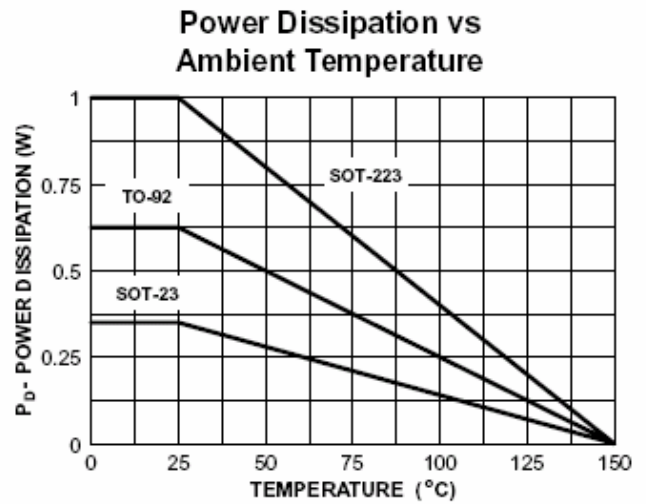
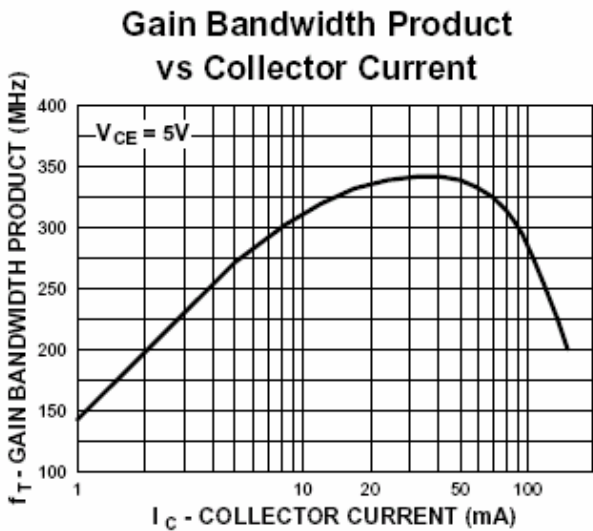
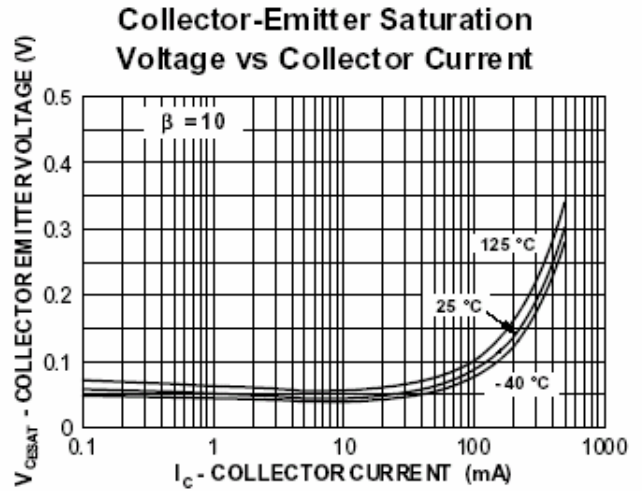
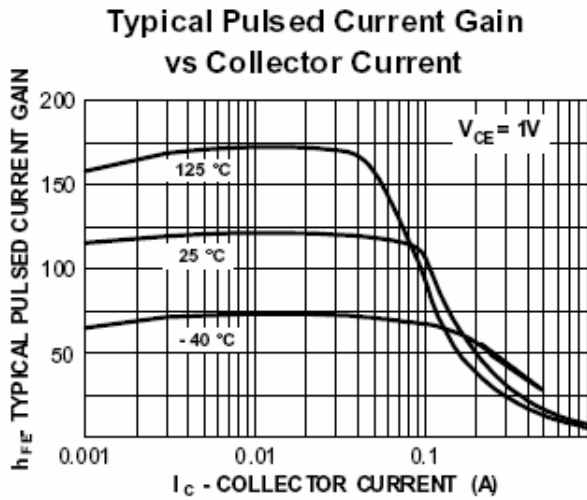
MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CB0}	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 _C	Collector Power Dissipation	625	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C
R _{θJA}	Thermal Resistance, Junction to Ambient	417	°C/W

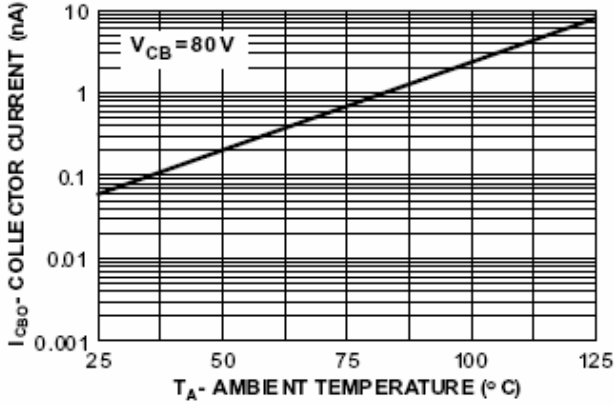
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

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

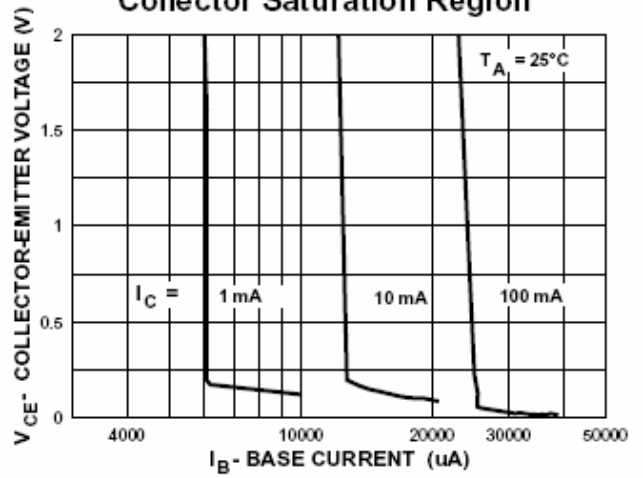
Typical Characteristics



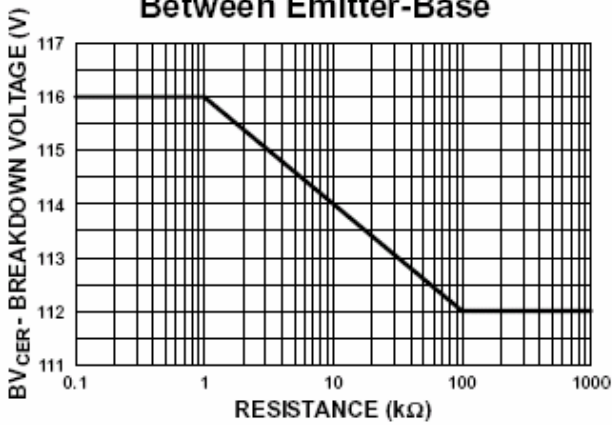
Collector-Cutoff Current vs Ambient Temperature



Collector Saturation Region



Collector-Emitter Breakdown Voltage with Resistance Between Emitter-Base



Input and Output Capacitance vs Reverse Voltage

