TO-92 Plastic-Encapsulate Transistors

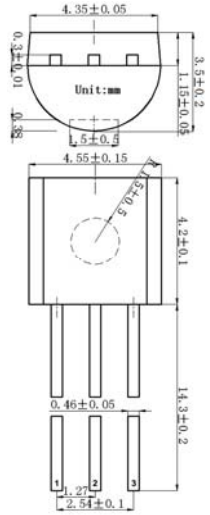
FEATURES

- Low Collector-Emitter Saturation Voltage
- High voltage
- PNP Transistors

MECHANICAL DATA

- Case style:TO-92 molded plastic
- Mounting position:any

TO-92



1. Emitter
2. Base
3. Collector

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

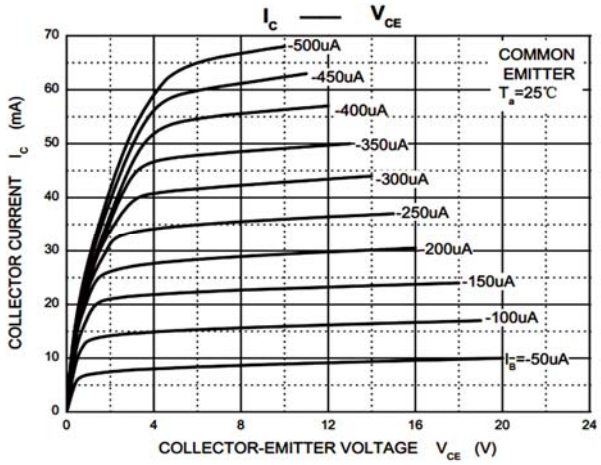
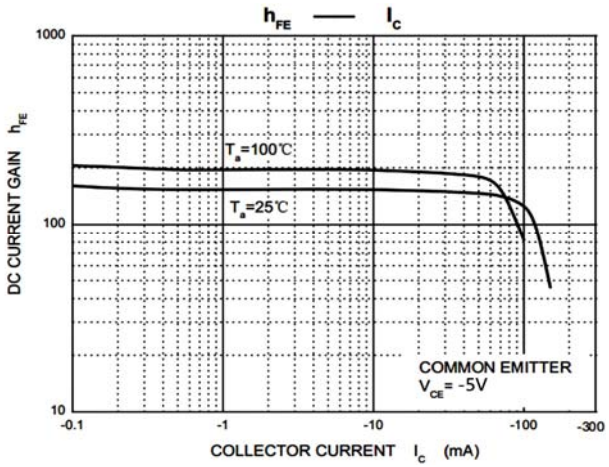
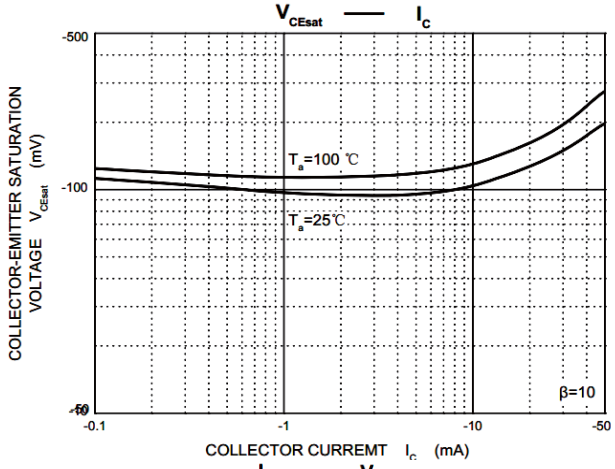
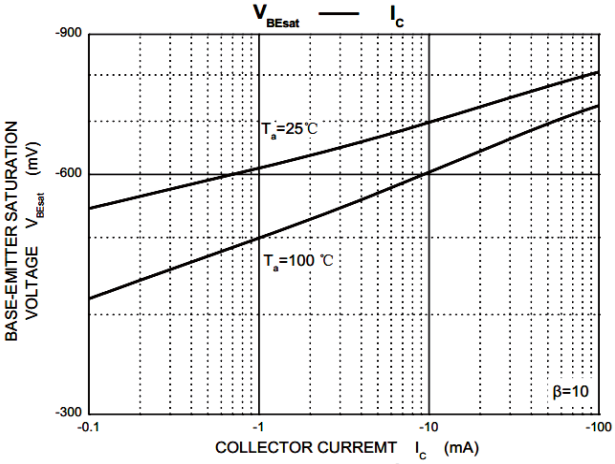
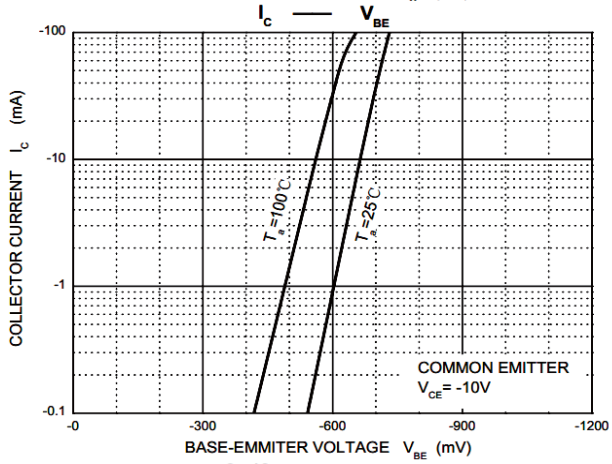
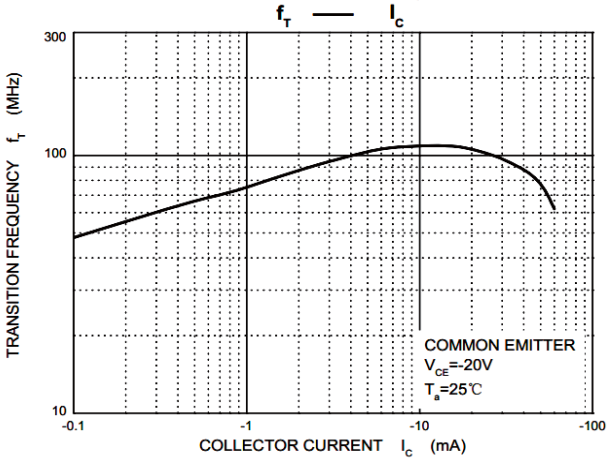
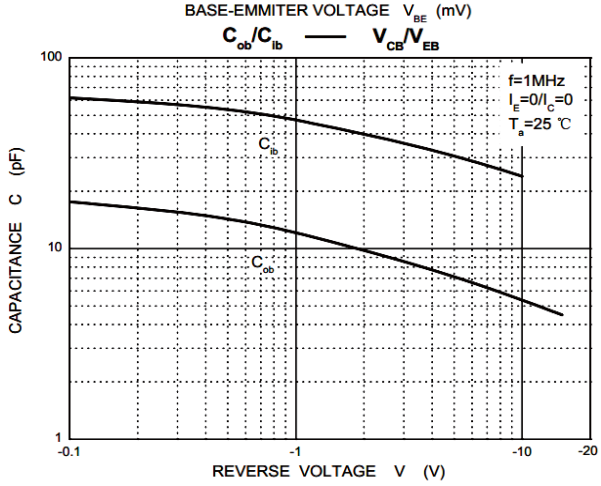
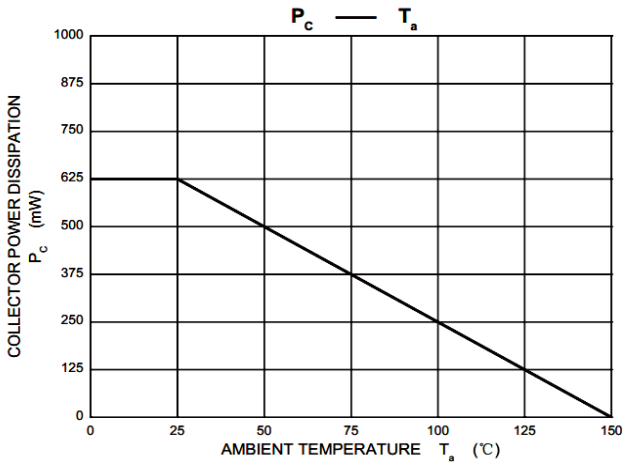
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-310	V
V_{CEO}	Collector-Emitter Voltage	-305	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current- Continuous	-200	mA
I_{CM}	Collector Current -Pulsed	-500	mA
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = -100μA,I_E = 0	-310			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = -1mA,I_B = 0	-305			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = -100μA,I_C = 0	-5			V
I_{CBO}	Collector cut-off current	V_{CB} = -200V,I_E = 0			-0.25	μA
I_{EBO}	Emitter cut-off current	V_{EB} = -5V,I_C = 0			-0.1	μA
$h_{FE(1)}$	DC current gain	V_{CE} = -5V, I_C = -1mA	100		200	
$h_{FE(2)}$		V_{CE} = -5V, I_C = -10mA	100			
$h_{FE(3)}$		V_{CE} = -10V, I_C = -1mA	60			
$h_{FE(4)}$		V_{CE} = -10V, I_C = -10mA	80			
$h_{FE(5)}$		V_{CE} = -10V, I_C = -80mA	60			
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = -20mA,I_B = -2mA			-0.2	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = -20mA,I_B = -2mA			-0.9	V
f_T	Transition frequency	V_{CE}=-20V,I_C=-10mA,f=30MHz	50			MHz

Classification OF $h_{FE(1)}$

Rank	A	B
Range	100 - 150	150 - 200

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics