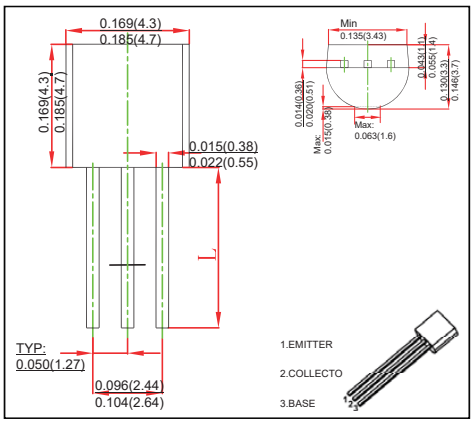
TO-92 Plastic-Encapsulate Transistors

FEATURES

- Low Collector to Emitter Saturation Voltage
- Allowing Supply with the Radial Taping
- TRANSISTOR (NPN)

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

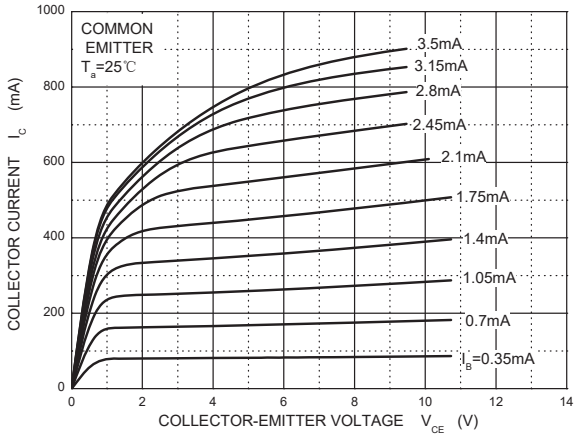
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	200	℃ /W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

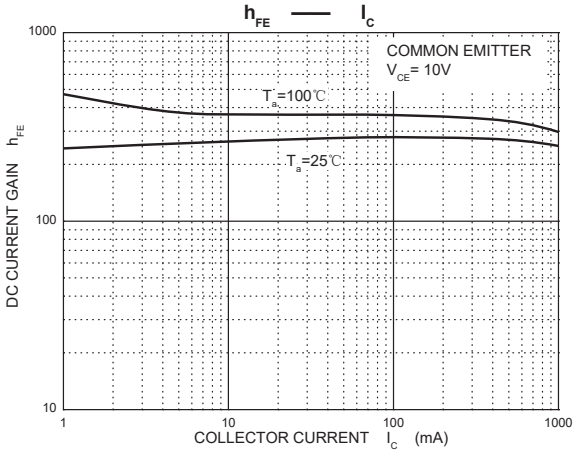
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=0.01mA,I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=2mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=10V,I_C=0.5A	85		340	
	$h_{FE(2)}$	V_{CE}=5V,I_C=1A				
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=0.5A,I_B=0.05A			0.4	V
Base-emitter voltage	V_{BE}	V_{CE}=0.5V,I_C=0.05A			1.2	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			20	pF
Transition frequency	f_T	V_{CE}=10V,I_C= 0.05A, f=200MHz		200		MHz

RATINGS AND CHARACTERISTIC CURVES

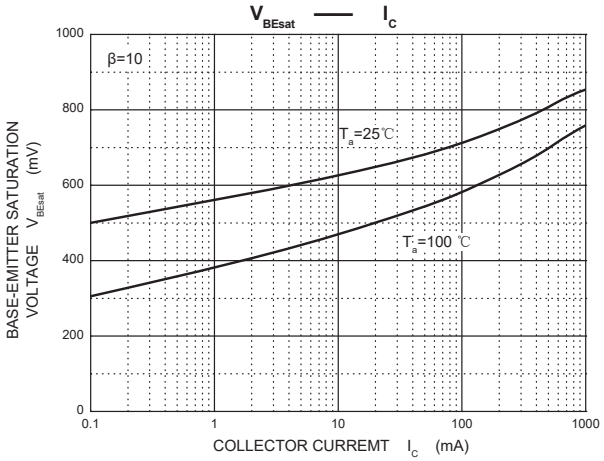
Static Characteristic



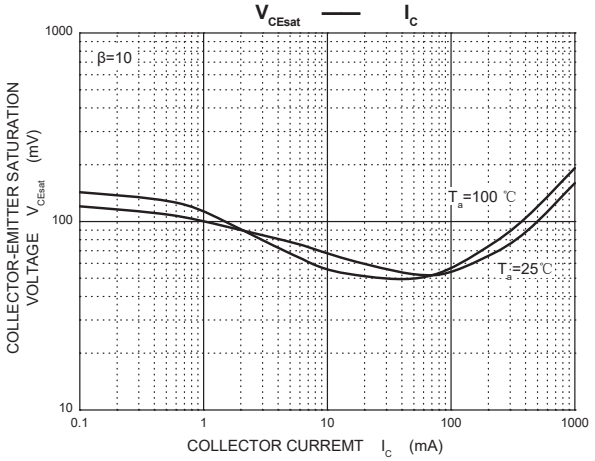
hFE — IC



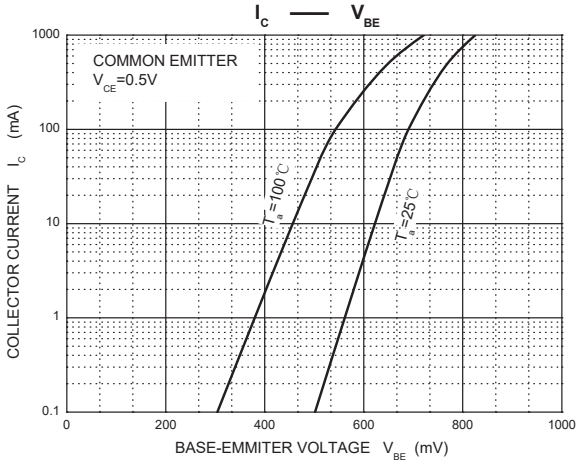
VBEsat — IC



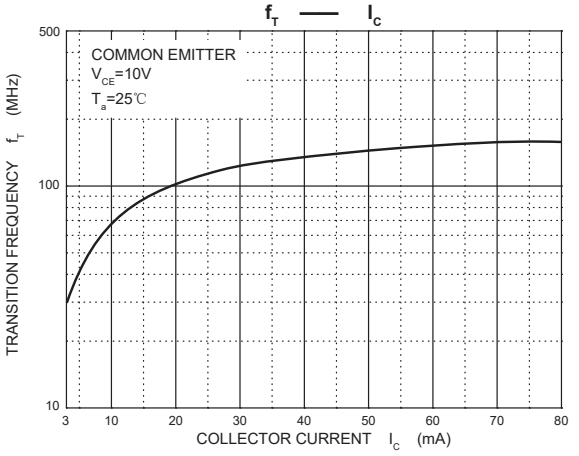
VCEsat — IC



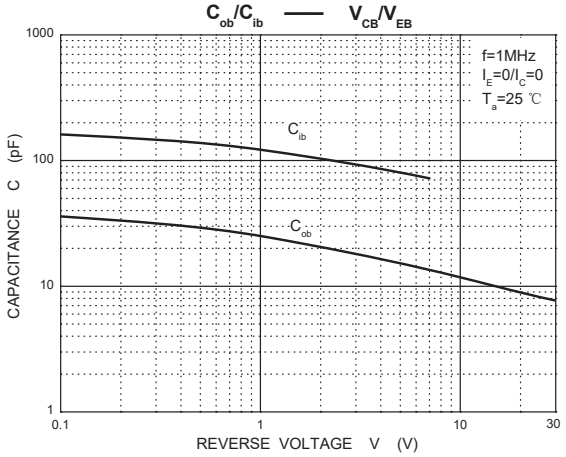
IC — VBE



fT — IC



Cob/Cib — VCB/VEB



PC — Ta