

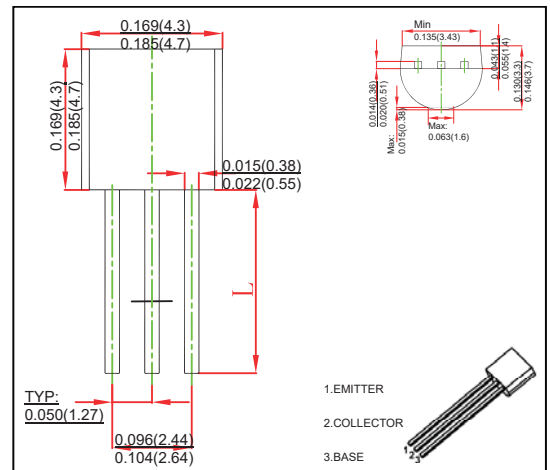
TO-92 Plastic-Encapsulate Transistors

FEATURES

- General Purpose convertor
- Low Frequency Power Amplifie
- Suitable for Driver Stage of Small Motor
- Transistor NPN

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

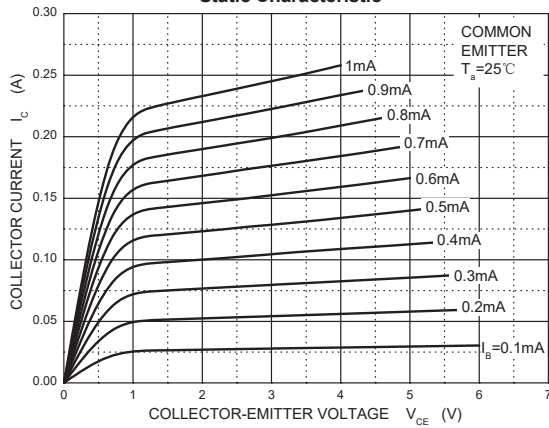
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Collector Power Dissipation	P_C	1	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	125	°C /W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

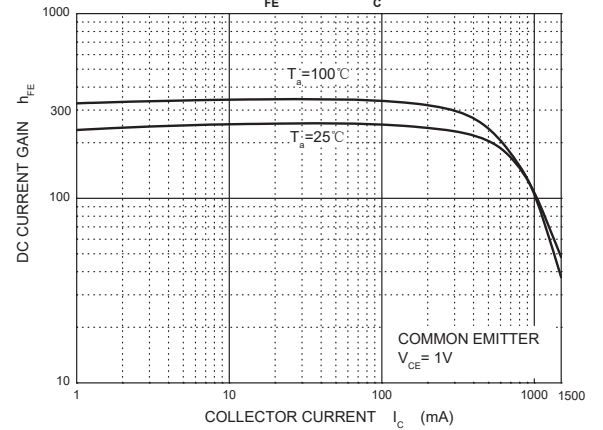
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1mA, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1mA, I_B = 0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.1mA, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 20V, I_B = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 1V, I_C = 100mA$	85		300	
	$h_{FE(2)}$	$V_{CE} = 1V, I_C = 800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 800mA, I_B = 80mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 800mA, I_B = 80mA$			1.2	V
Base-emitter voltage	V_{BE}	$V_{CE} = 1V, I_C = 10mA$			1.0	V
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$			15	pF
Transition frequency	f_T	$V_{CE} = 10V, I_C = 50mA, f = 30MHz$	100			MHz

RATINGS AND CHARACTERISTIC CURVES

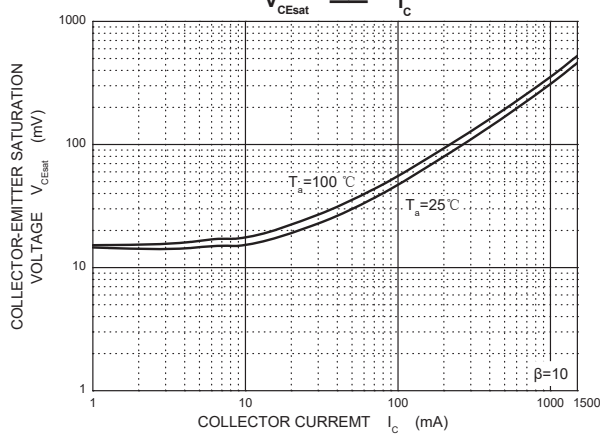
Static Characteristic



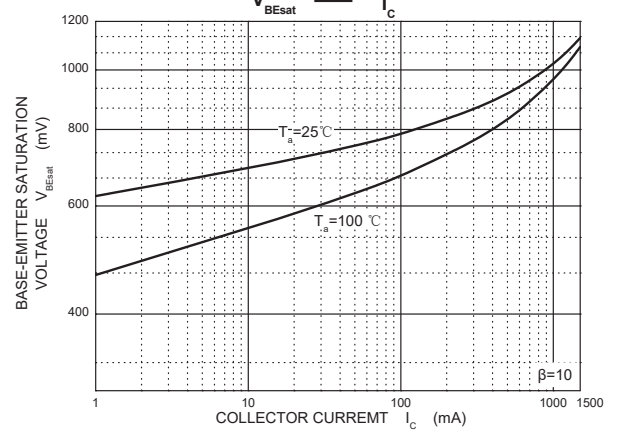
h_{FE} — I_C



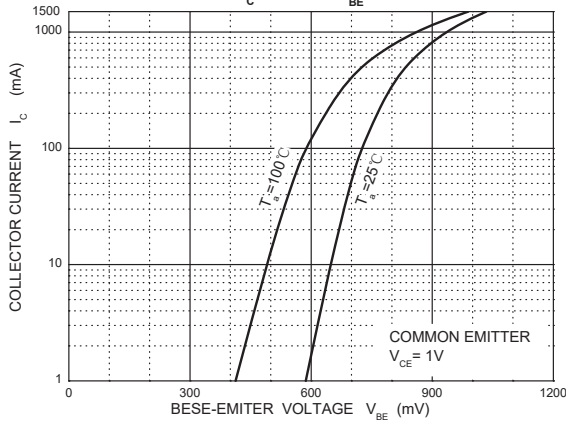
V_{CEsat} — I_C



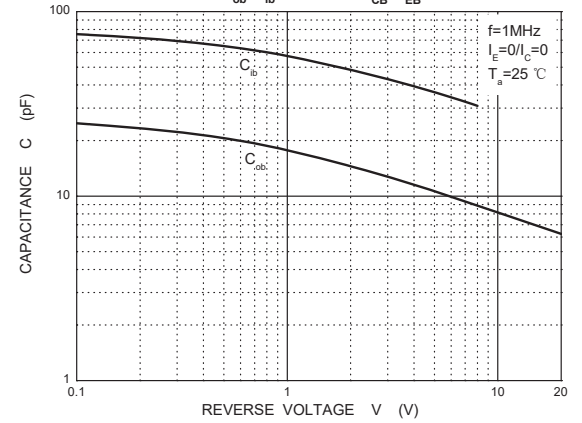
V_{BEsat} — I_C



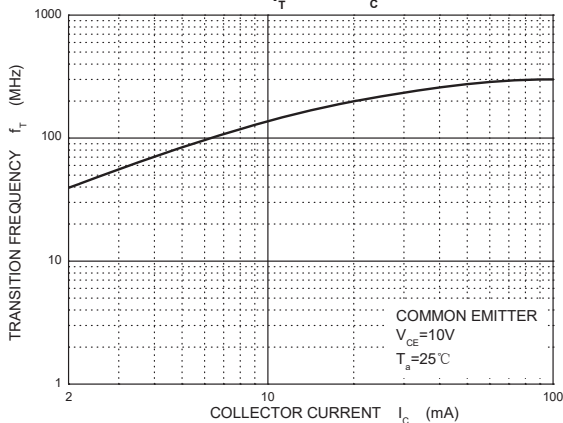
I_C — V_{BE}



C_{ob}/C_{ib} — V_{CB}/V_{EB}



f_T — I_C



P_C — T_a

