

TO-92 Plastic-Encapsulate Transistors

FEATURE

- Switching and Amplification in High Voltage Applications such as elephony
- Low Current(max. 600mA)
- High Voltage(max.130v)
- TRANSISTOR (PNP)

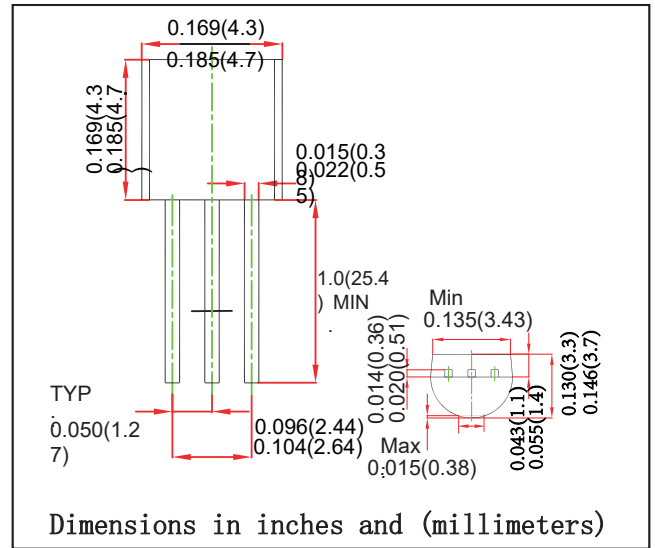
MECHANICAL DATA

- 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_{CB0}	-130	V
Collector-Emitter Voltage	V_{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-0.6	A
Collector Power Dissipation	P_D	625	mW
Thermal Resistance, junction to Ambient	$R_{\theta JA}$	200	°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	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-130			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$			-0.1	μA
DC current gain	h_{FE1}	$V_{CE} = -5V, I_C = -1mA$	30			
	h_{FE2}	$V_{CE} = -5V, I_C = -10mA$	40		180	
	h_{FE3}	$V_{CE} = -5V, I_C = -50mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -1mA$			-0.2	V
	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10mA, I_B = -1mA$			-1	V
	$V_{BE(sat)}$	$I_C = -50mA, I_B = -5mA$			-1	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -10mA, f = 30MHz$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$			6	pF

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Power Derating Curve

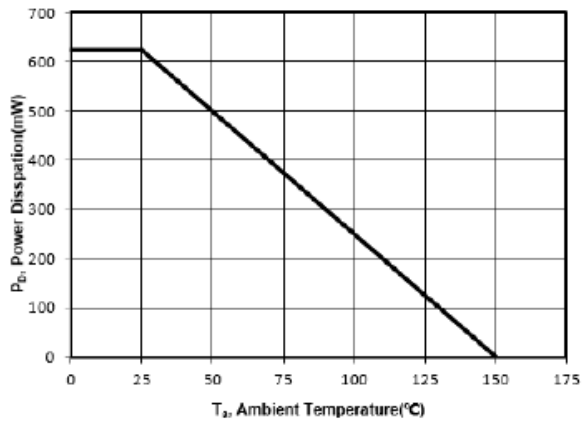


Fig. 2 Output Characteristics Curve

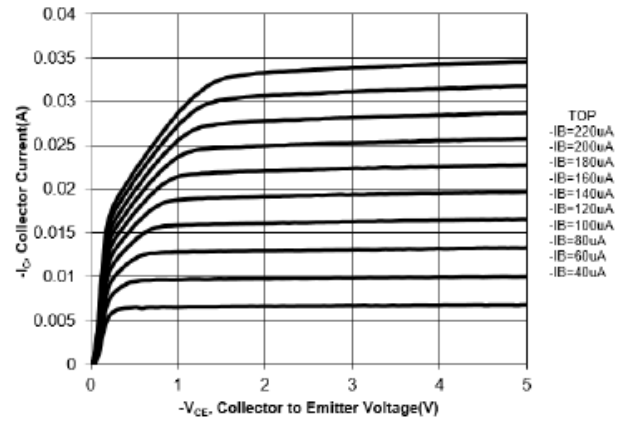


Fig. 3 Collector Current vs. V_{BE}

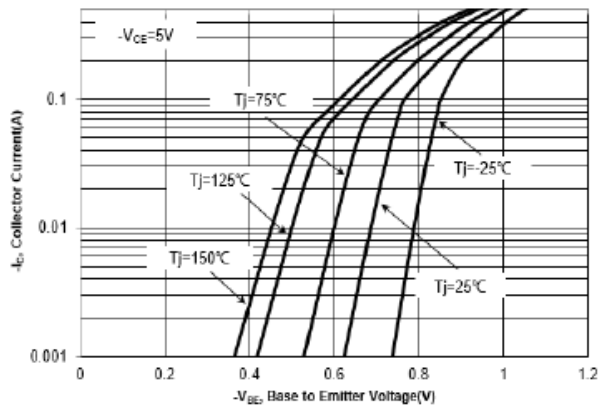
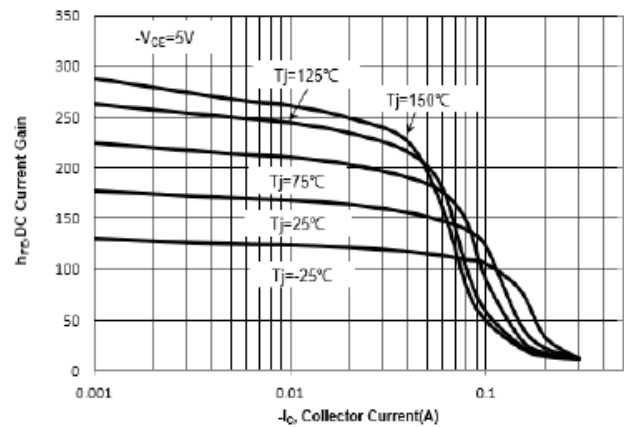


Fig. 4 DC Current Gain vs. Collector Current



RATINGS AND CHARACTERISTIC CURVES

Fig 5. $V_{BE(sat)}$ vs. Collector Current

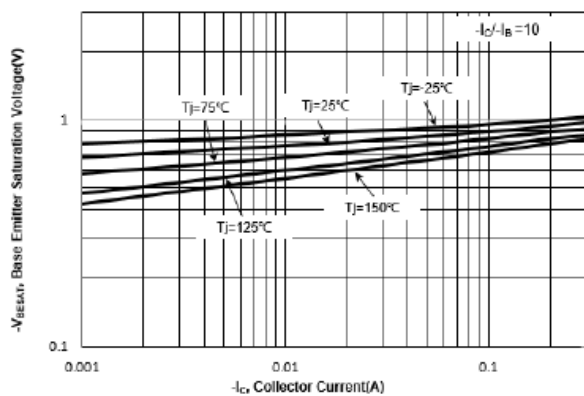


Fig 6. $V_{CE(sat)}$ vs. Collector Current

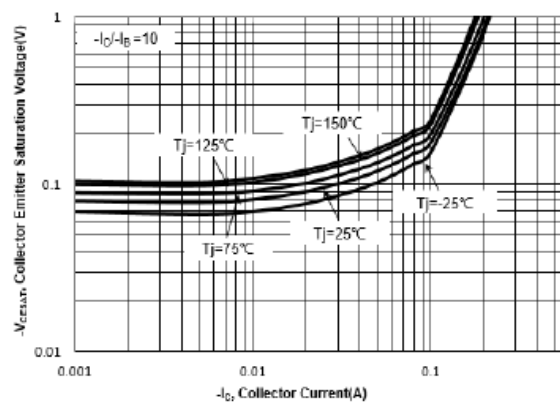


Fig 7. Output Capacitance

