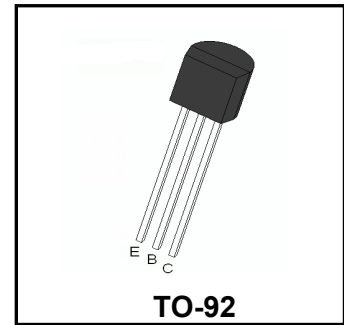


Plastic-Encapsulate Transistors

PNP General Purpose Amplifier



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-40	V
Collector-Emitter Voltage	BV_{CEO}	-40	V
Emitter-Base Voltage	BV_{EBO}	-5	V
Collector Current	I_C	-200	mA
Collector Power Dissipation	P_D	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C = -10\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-40			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-50	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-50	nA
DC current gain	h_{FE}	$V_{CE} = -1V, I_B = -0.1mA$	60		300	
		$V_{CE} = -1V, I_B = -1.0mA$	80			
		$V_{CE} = -1V, I_B = -10mA$	100			
		$V_{CE} = -1V, I_B = -50mA$	60			
		$V_{CE} = -1V, I_B = -100mA$	30			
Collector-emitter saturation voltage	V_{CESAT}	$I_C = -50mA, I_B = -5mA$			-0.4	V
base -emitter saturation voltage	V_{BESAT}	$I_C = -50mA, I_B = -5mA$			-0.95	V
Transition frequency	f_T	$V_{CE} = -20V, I_B = 10mA$	250			MHz

Typical Characteristics

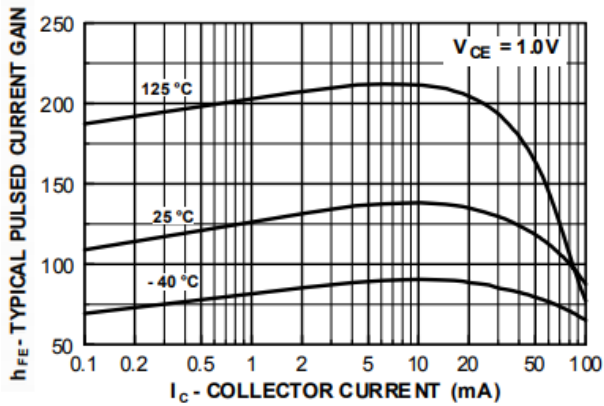


Figure 1. Typical Pulsed Current Gain vs Collector Current

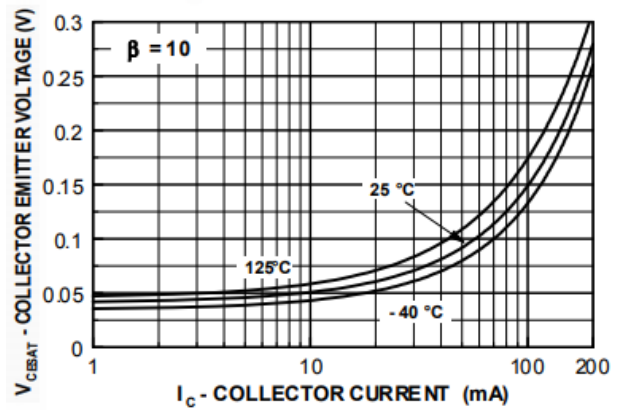


Figure 2. Collector-Emitter Saturation Voltage vs Collector Current

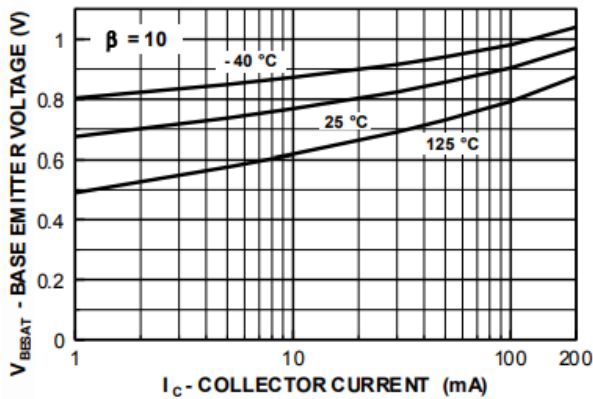


Figure 3. Base-Emitter Saturation Voltage vs Collector Current

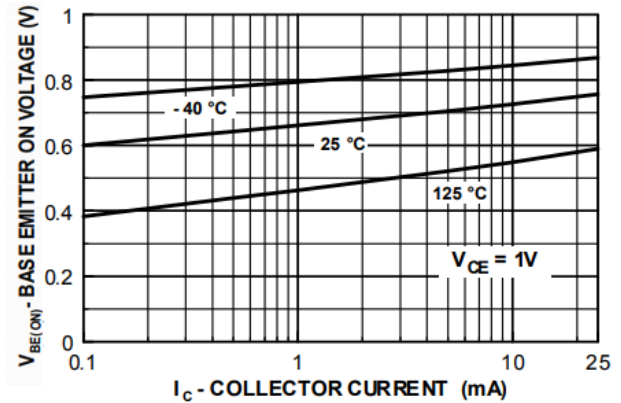


Figure 4. Base Emitter ON Voltage vs Collector Current

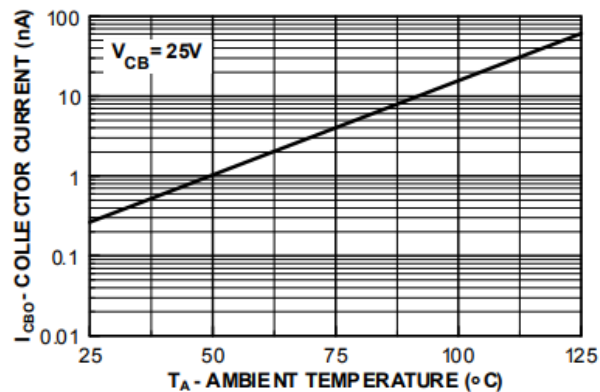


Figure 5. Collector-Cutoff Current vs Ambient Temperature

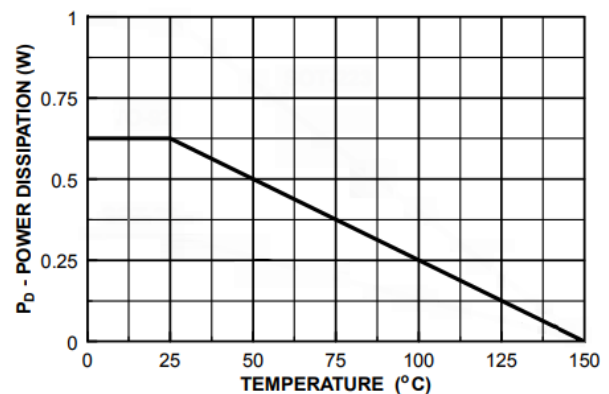
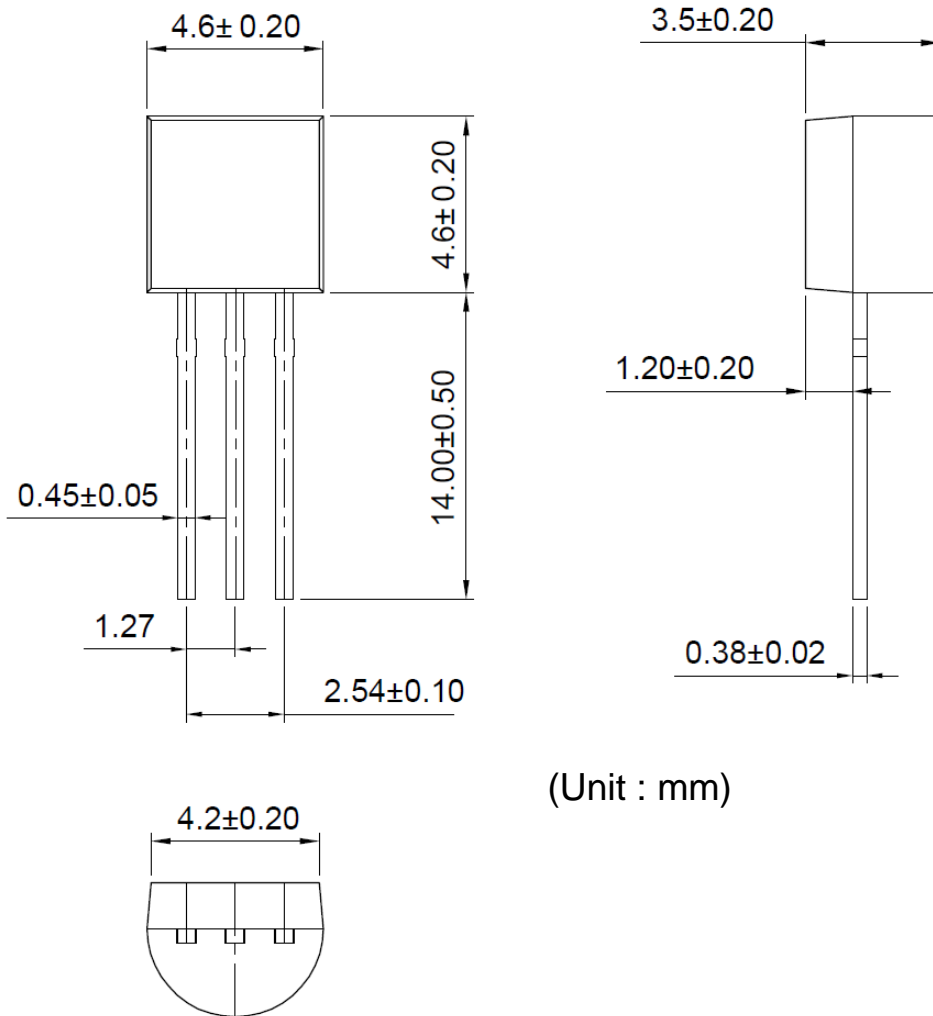


Figure 6. Power Dissipation vs Ambient Temperature

Package Dimensions

TO-92



(Unit : mm)

Package	Packing Method	Pack uantity
TO-92	Bulk	1000pcs/Bag
TO-92	Tape	2000pcs/Box