

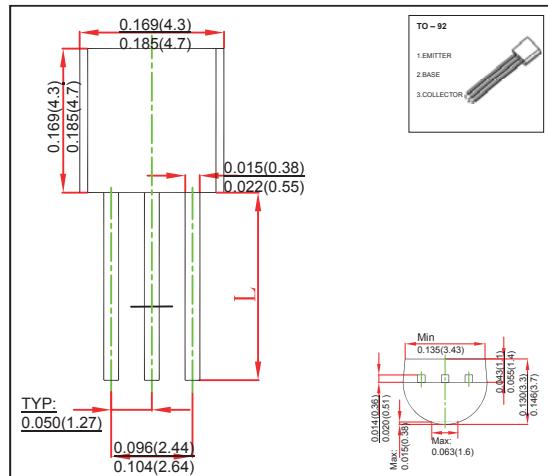
TO-92 Plastic-Encapsulate Transistors

FEATURES

- Switching and amplification in high voltage
- Applications such as telephony
- Low current
- High voltage
- PNP Transistors

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}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-0.6	A
Collector Power Dissipation	K_D	625	mW
Thermal Resistance, junction to Ambient	R_{KJA}	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}	$I_C = -0.1\text{mA}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	V_{(BR)CEO}	$I_C = -1\text{mA}, I_B = 0$	-40			V
Emitter-base breakdown voltage	V_{(BR)EBO}	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$			-0.1	
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	
DC current gain	h_{FE}	$V_{CE} = -1\text{V}, I_C = -1\text{mA}$	30			
		$V_{CE} = -1\text{V}, I_C = -10\text{mA}$	50			
		$V_{CE} = -2\text{V}, I_C = -150\text{mA}$	50		150	
		$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	20			
Collector-emitter saturation voltage	V_{CE(sat)}	$I_C = -150\text{mA}, I_B = -15\text{mA}$			-0.4	V
		$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.75	V
Base-emitter saturation voltage	V_{BE(sat)}	$I_C = -150\text{mA}, I_B = -15\text{mA}$	-0.75		-0.95	V
		$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.3	V
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			8.5	pF
Emitter input capacitance	C_{ib}	$V_{EB} = -0.5\text{V}, I_C = 0, f = 1\text{MHz}$			30	pF
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -20\text{mA}, f = 100\text{MHz}$	150			MHz

*Pulse test: pulse width ≤300μs, duty cycle ≤ 2.0%.