

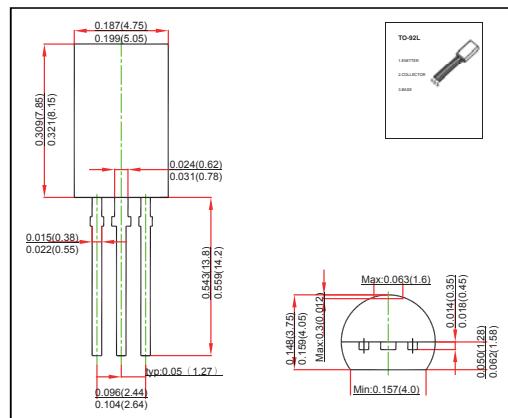
TO-92L Plastic-Encapsulate Transistors

FEATURE

- High Voltage : $V_{CEO}=300V$
- Small Collector Output Capacitance: $C_{OB}=3.0\text{pF}(\text{Typ})$
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style: TO-92L 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}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current -Continuous	I_C	0.1	A
Collector Power Dissipation	P_C	0.9	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ C$ unless otherwise specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C = 100\mu A, I_E = 0$	300			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C = 3mA, I_B = 0$	300			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E = 100\mu A, I_C = 0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB} = 240V, I_E = 0$			1.0	μA
Collector cut-off current	I_{CEO}	$V_{CB} = 240V, I_B = 0$			5.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 7V, I_C = 0$			1.0	μA
DC current gain	h_{FE}	$V_{CE} = 10V, I_C = 20mA$	30		150	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 1mA$			1.0	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 20mA, f = 30MHz$	50			MHz
Collector output capacitance	C_{OB}	$V_{CB} = 20V, I_E = 0, f = 1MHz$		3		pF