

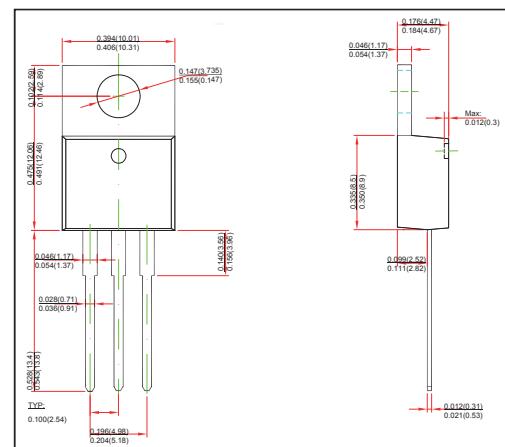
TO-220L Plastic-Encapsulate Transistors

FEATURES

- High Forward Current Transfer Ratio hFE
- Has Satisfactory Linearity
- Low Collector to Emitter Saturation Voltage $V_{CE(sat)}$
- Allowing Supply with the Radial Taping
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style: TO-220L 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}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	3	A
Collector Power Dissipation	P_C	2	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	$V_{(BR)CBO}$	$I_C=0.1\text{mA}, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=30\text{mA}, I_B=0$	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.1\text{mA}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			100	μA
Collector cut-off current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6\text{V}, I_C=0$			100	μA
DC current gain	$h_{FE}(1)$	$V_{CE}=4\text{V}, I_C=1\text{A}$	70		320	
	$h_{FE}(2)$	$V_{CE}=4\text{V}, I_C=3\text{A}$	10			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\text{A}, I_B=375\text{mA}$			1.2	V
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{V}, I_C=3\text{A}$			1.8	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=0.2\text{A}, f=10\text{MHz}$	30			MHz