

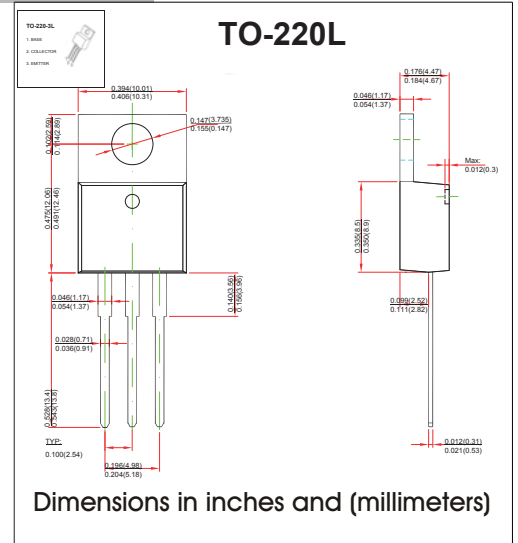
## TO-220L Plastic-Encapsulate Transistors

### FEATURES

- High voltage:  $V_{(BR)CEO} = 300\text{ V}$
- Small collector output capacitance:  $C_{ob} = 3.0\text{ pF (typ.)}$
- Collector metal (fin) is fully covered with mold resin.
- TRANSISTOR (NPN)

### MECHANICAL DATA

- Case style: TO-220L molded plastic
- Mounting position: any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	meter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current -Continuous	0.1	A
$P_C$	Collector Power Dissipation	2	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55-150	°C

#### PACKAGE INFORMATION

Device	Package	Shipping
2SC4544	TO-220L	50/Tape&Reel

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=240\text{V}, I_E=0$			1.0	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7\text{V}, I_C=0$			1.0	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=10\text{V}, I_C=4\text{mA}$	20			
	$h_{FE(2)}$	$V_{CE}=10\text{V}, I_C=20\text{mA}$	30		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			1.0	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=20\text{mA}$	50	70		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$		3.0		pF



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# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

