

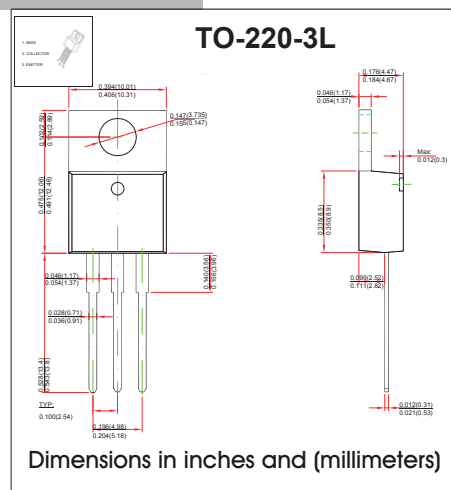
TO-220-3L Plastic-Encapsulate Transistors

FEATURES

- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style:TO-220-3L molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	TIP41	TIP41A	TIP41B	TIP41C	Unit
V_{CBO}	Collector-Base Voltage	40	60	80	100	V
V_{CEO}	Collector-Emitter Voltage	40	60	80	100	V
V_{EBO}	Emitter-Base Voltage	5				V
I_C	Collector Current -Continuous	6				A
P_C	Collector Power Dissipation	2				W
T_J	Junction Temperature	150				°C
T_{stg}	Storage Temperature Range	-55~+150				°C

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	TIP41 TIP41A TIP41B TIP41C $V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	40 60 80 100		V
Collector-emitter breakdown voltage	TIP41 TIP41A TIP41B TIP41C $V_{CEO(sus)}$	$I_C = 30mA, I_B = 0$	40 60 80 100		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	5		V
Collector cut-off current	TIP41 TIP41A TIP41B TIP41C I_{CBO}	$V_{CB} = 40V, I_E = 0$ $V_{CB} = 60V, I_E = 0$ $V_{CB} = 80V, I_E = 0$ $V_{CB} = 100V, I_E = 0$	0.4		mA
Collector cut-off current	TIP41/41A TIP41B/41C I_{CEO}	$V_{CE} = 30V, I_B = 0$ $V_{CE} = 60V, I_B = 0$	0.7		mA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		1	mA
DC current gain	$h_{FE(1)}$	$V_{CE} = 4V, I_C = 0.3A$	30		
	$h_{FE(2)}$	$V_{CE} = 4V, I_C = 3A$	15	75	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 6A, I_B = 0.6A$		1.5	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE} = 4V, I_C = 6A$		2	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 0.5A$ $f = 1MHz$	3		MHz



RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics

