

Pb Free Plating Product

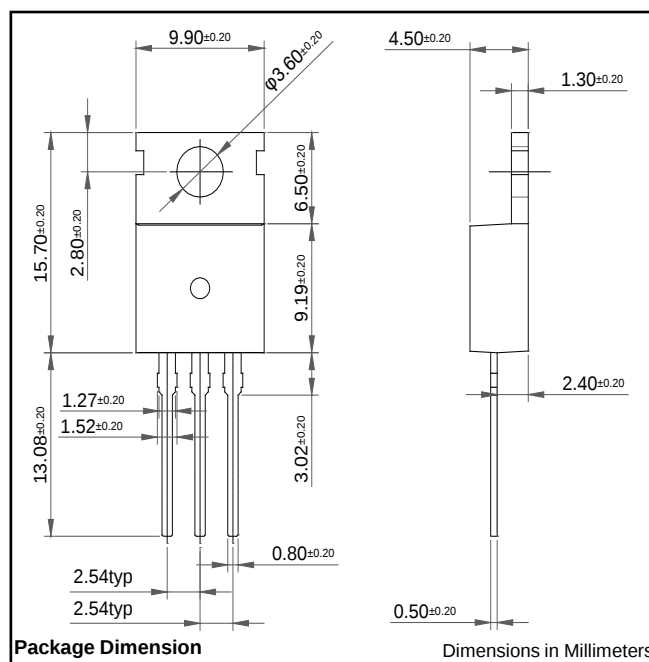
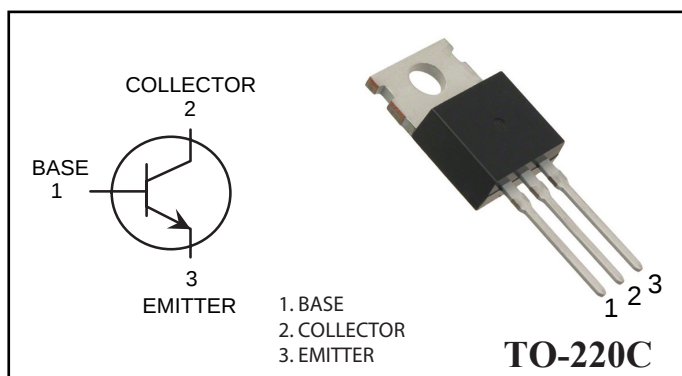
TIP41/TIP41A/TIP41B/TIP41C



NPN Silicon Epitaxial Power Transistor

FEATURES:

- * Medium Power Linear Switching Applications
- * Complement to TIP42/TIP42A/TIP42B/TIP42C

**MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	TIP41	TIP41A	TIP41B	TIP41C	Units
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				$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150				$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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	$V_{(BR)CEO}$	$I_C=30mA, I_B=0$	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