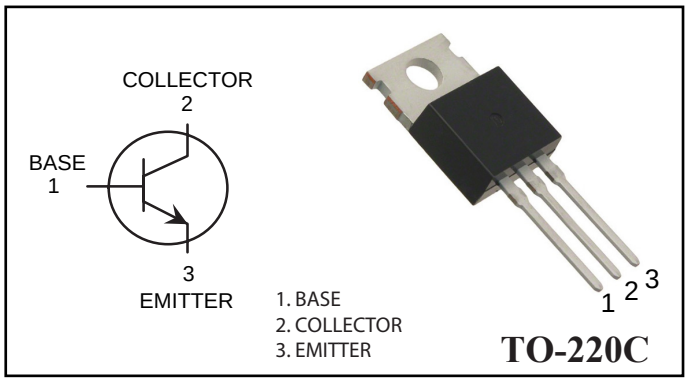
Pb Free Plating Product

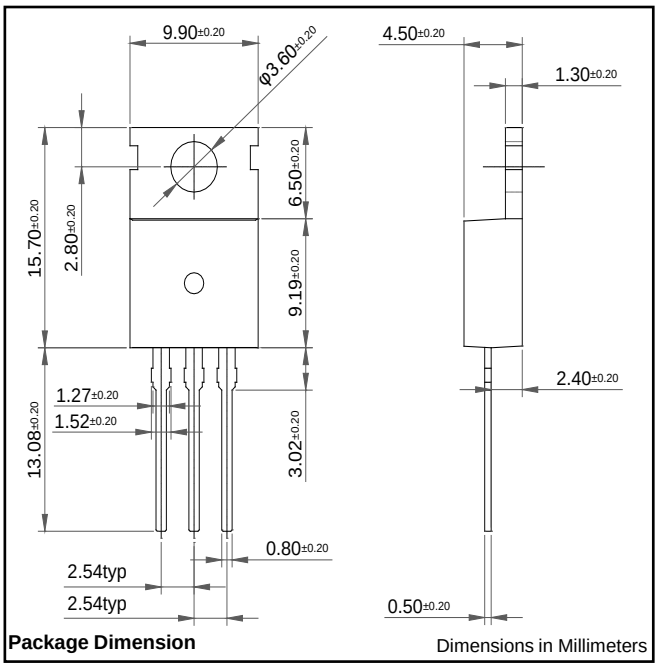
TIP41/TIP41A/TIP41B/TIP41C

NPN Silicon Epitaxial Power Transistor

FEATURES:

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





MAXIMUM RATINGS (T_A=25℃ 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				℃
T_{stg}	Storage Temperature	-55-150				℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ 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