

Pb Free Plating Product

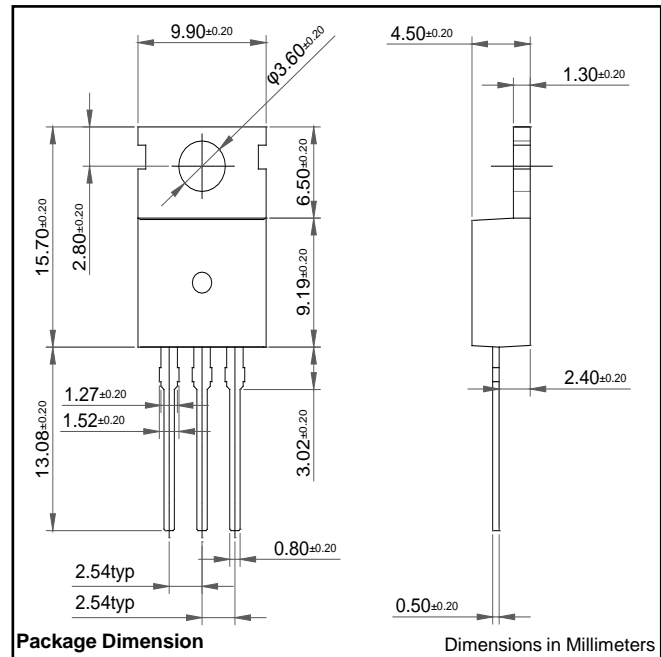
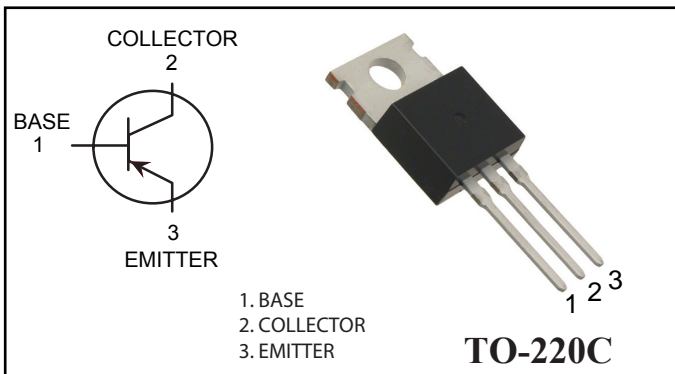
TIP42/TIP42A/TIP42B/TIP42C



PNP Silicon Epitaxial Power Transistor

Features:

- * Medium Power Linear Switching Applications
- * Complement to TIP41/TIP41A/TIP41B/TIP41C



MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Parameter	Symbol	TIP42	TIP42A	TIP42B	TIP42C	Units
Collector-Base Voltage	V _{CBO}	-40	-60	-80	-100	V
Collector-Emitter Voltage	V _{CEO}	-40	-60	-80	-100	V
Emitter-Base Voltage	V _{EBO}	-5				V
Collector Current -Continuous	I _C	-6				A
Collector Power Dissipation	P _C	2				W
Junction Temperature	T _J	150				°C
Storage Temperature Range	T _{stg}	-55to+150				°C

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage TIP42 TIP42A TIP42B TIP42C	$V_{(BR)CBO}$	$I_C = -1mA, I_E = 0$	-40 -60 -80 -100		V
Collector-emitter breakdown voltage TIP42 TIP42A TIP42B TIP42C	$V_{(BR)CEO}^*$	$I_C = -30mA, I_B = 0$	-40 -60 -80 -100		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1mA, I_C = 0$	-5		V
Collector cut-off current TIP42 TIP42A TIP42B TIP42C	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 TIP42/42A TIP42B/42C	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}	$V_{CE} = -4V, I_C = -6A$		-2	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -0.5$	3		MHz

* Pulse test