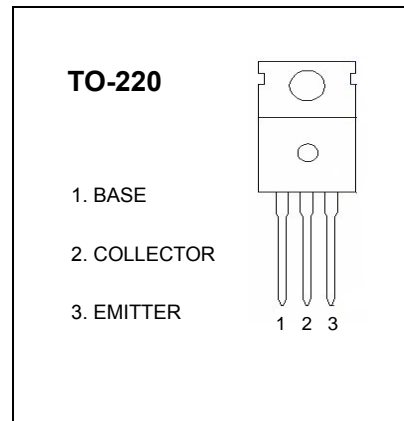


TO-220 Plastic-Encapsulate Transistors

TIP32/32A/32B/32C TRANSISTOR (PNP)

FEATURES

Medium Power Linear Switching Applications



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

Symbol	Parameter	TIP32	TIP32A	TIP32B	TIP32C	Unit
V _{CB0}	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	-3				A
P _C	Collector Power Dissipation	2				W
R _{θJA}	Thermal Resistance from Junction to Ambient	62.5				
T _j	Junction Temperature	150				°C
T _{stg}	Storage Temperature	-55~+150				°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	TIP32 TIP32A TIP32B TIP32C	V _{(BR)CBO}	I _C = -1mA, I _E = 0	-40 -60 -80 -100	V
Collector-emitter breakdown voltage *	TIP32 TIP32A TIP32B TIP32C	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	TIP32 TIP32A TIP32B TIP32C	I _{CB0}	V _{CB} = -40V, I _E = 0 V _{CB} = -60V, I _E = 0 V _{CB} = -80V, I _E = 0 V _{CB} = -100V, I _E = 0	-200	μA
Collector cut-off current	TIP32/32A TIP32B/32C	I _{CEO}	V _{CE} = -30V, I _B = 0 V _{CE} = -60V, I _B = 0	-0.3	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 = -1A	25	
		h _{FE(2)}	V _{CE} = -4 V, I _C = -3A	15	75
Collector-emitter saturation voltage		V _{CE(sat)}	I _C = -3A, I _B = -0.375A	-1.2	V
Base-emitter voltage		V _{BE(on)}	V _{CE} = -4V, I _C = -3A	-1.8	V
Transition frequency		f _T	V _{CE} = -10V, I _C = -0.5A	3	MHz

* Pulse Test: PW ≤ 300μs, Duty Cycle ≤ 2%.