



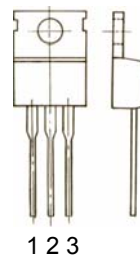
TIP32/32A/32B/32C TRANSISTOR (PNP)

FEATURES

Medium Power Linear Switching Applications

TO-220

- 1. BASE
- 2. COLLECTOR
- 3. EMITTER



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

Symbol	Parameter	TIP32	TIP32A	TIP32B	TIP32C	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	-3				A
P _C	Collector Power Dissipation	2				W
T _j	Junction Temperature	150				°C
T _{stg}	Storage Temperature Range	-55to+150				°C

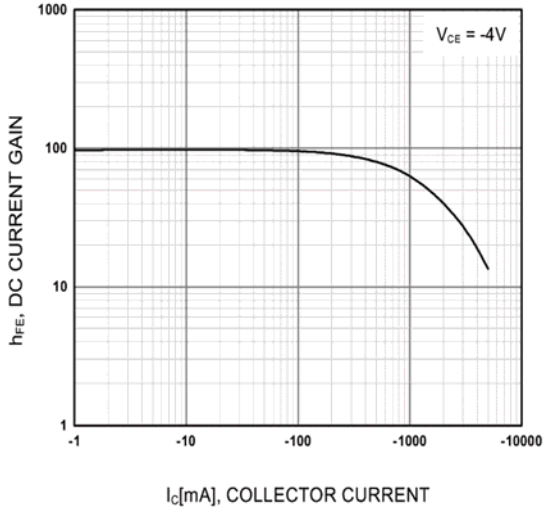
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V(BR) _{CBO}	I _C = -1mA, I _E =0	-40 -60 -80 -100		V
Collector-emitter breakdown voltage *	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	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		-200	μA
Collector cut-off current	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	10	50	
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

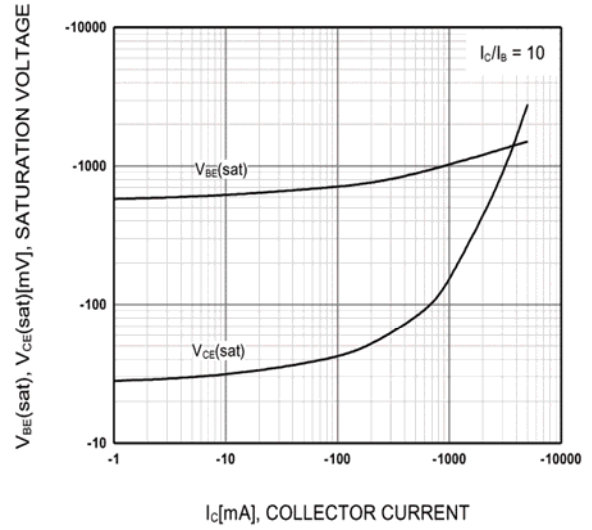
* Pulse Test: PW≤300μs, Duty Cycles≤2%

Typical Characteristics

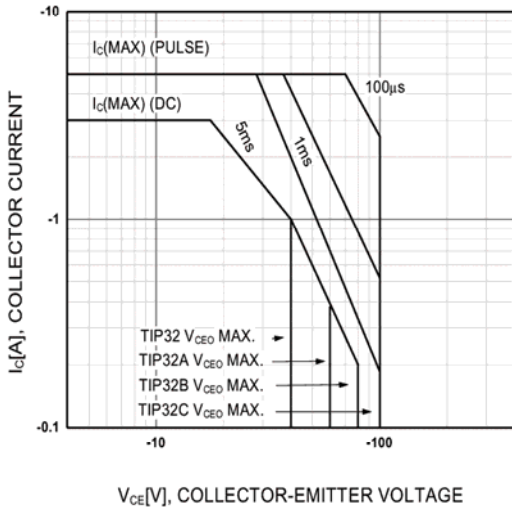
TIP32/TIP32A/TIP32B/TIP32C



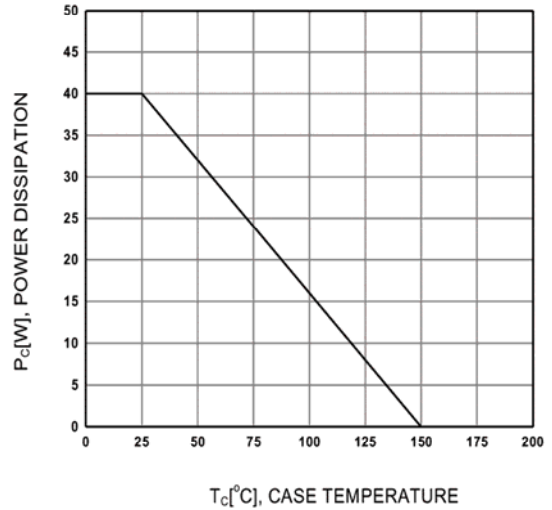
DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Safe Operating Area



Power Derating