

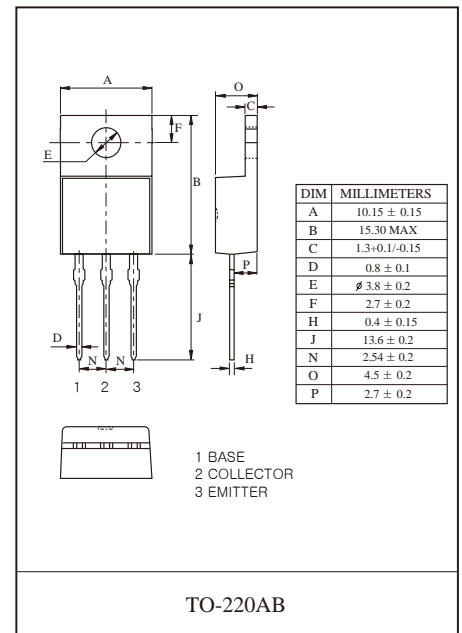
TIP32/32A/32B/32C TRANSISTOR (PNP)

FEATURES

Medium Power Linear Switching Applications

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

Symbol	Parameter	TIP32	TIP32A	TIP32B	TIP32C	Unit
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	-3				A
P_C	Collector Power Dissipation	2				W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	62.5				
T_j	Junction Temperature	150				$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150				$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector- base breakdown voltage	TIP32 TIP32A TIP32B TIP32C	$V_{(BR)CBO}$ $I_C = -1\text{mA}, I_E = 0$	-40 -60 -80 -100		V
Collector- emitter breakdown voltage *	TIP32 TIP32A TIP32B TIP32C	$V_{CEO(sus)}$ $I_C = -30\text{mA}, I_B = 0$	-40 -60 -80 -100		V
Emitter- base breakdown voltage		$V_{(BR)EBO}$ $I_E = -1\text{mA}, I_C = 0$	-5		V
Collector cut- off current	TIP32 TIP32A TIP32B TIP32C	I_{CBO} $V_{CB} = -40\text{V}, I_E = 0$ $V_{CB} = -60\text{V}, I_E = 0$ $V_{CB} = -80\text{V}, I_E = 0$ $V_{CB} = -100\text{V}, I_E = 0$		-200	μA
Collector cut- off current	TIP32/32A TIP32B/32C	I_{CEO} $V_{CE} = -30\text{V}, I_B = 0$ $V_{CE} = -60\text{V}, I_B = 0$		-0.3	mA
Emitter cut- off current		I_{EBO} $V_{EB} = -5\text{V}, I_C = 0$		-1	mA
DC current gain	$h_{FE(1)}$	$V_{CE} = -4\text{V}, I_C = -1\text{A}$	25		
	$h_{FE(2)}$	$V_{CE} = -4\text{V}, I_C = -3\text{A}$	15	75	
Collector- emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3\text{A}, I_B = -0.375\text{A}$		-1.2	V
Base- emitter voltage	$V_{BE(on)}$	$V_{CE} = -4\text{V}, I_C = -3\text{A}$		-1.8	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -0.5\text{A}$	3		MHz

* Pulse Test: $PW \leq 300\mu\text{s}$, Duty Cycles $\leq 2\%$.

Typical Characteristics

