

SPTECH Silicon PNP Power Transistors TIP32/32A/32B/32C

DESCRIPTION

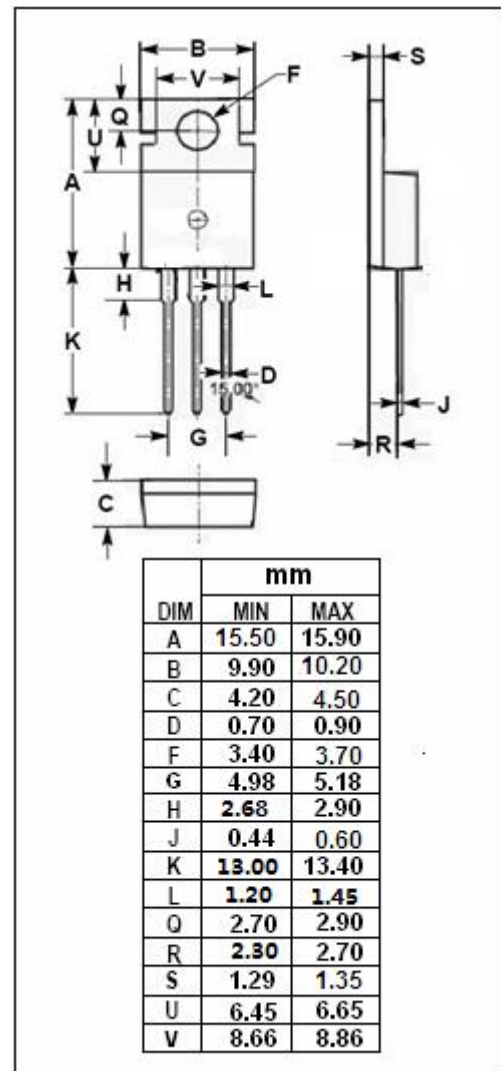
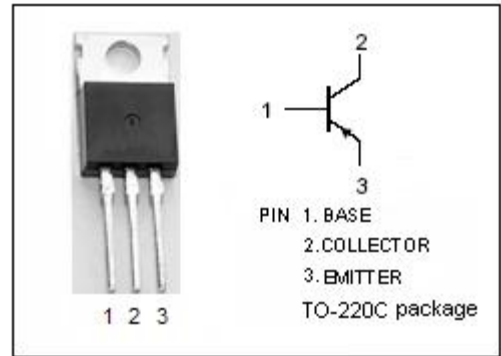
- DC Current Gain $-h_{FE} = 25(\text{Min}) @ I_C = -1.0\text{A}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -40\text{V}(\text{Min})$ - TIP32; $-60\text{V}(\text{Min})$ - TIP32A
-80V(Min)- TIP32B; $-100\text{V}(\text{Min})$ - TIP32C
- Complement to Type TIP31/31A/31B/31C

APPLICATIONS

- Designed for use in general purpose amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-base Voltage	TIP32	-40
		TIP32A	-60
		TIP32B	-80
		TIP32C	-100
V_{CEO}	Collector-emitter Voltage	TIP32	-40
		TIP32A	-60
		TIP32B	-80
		TIP32C	-100
V_{EBO}	Emitter-base Voltage	-5	V
I_C	Collector Current-Continuous	-3	A
I_{CM}	Collector Current-Pulse	-5	A
I_B	Base Current	-1	A
P_C	Collector Power Dissipation $T_c=25^\circ\text{C}$	40	W
	Collector Power Dissipation $T_a=25^\circ\text{C}$	2	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

$T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	TIP32	$I_C = -30\text{mA}; I_B = 0$	-40		V
		TIP32A		-60		
		TIP32B		-80		
		TIP32C		-100		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		$I_C = -3\text{A}; I_B = -0.375\text{A}$		-1.2	V
$V_{BE(on)}$	Base-Emitter On Voltage		$I_C = -3\text{A}; V_{CE} = -4\text{V}$		-1.8	V
I_{CES}	Collector Cutoff Current	TIP32	$V_{CE} = -40\text{V}; V_{EB} = 0$		-0.2	mA
		TIP32A	$V_{CE} = -60\text{V}; V_{EB} = 0$			
		TIP32B	$V_{CE} = -80\text{V}; V_{EB} = 0$			
		TIP32C	$V_{CE} = -100\text{V}; V_{EB} = 0$			
I_{CEO}	Collector Cutoff Current	TIP32/32A	$V_{CE} = -30\text{V}; I_B = 0$		-0.3	mA
		TIP32B/32C	$V_{CE} = -60\text{V}; I_B = 0$			
I_{EBO}	Emitter Cutoff Current		$V_{EB} = -5\text{V}; I_C = 0$		-1.0	mA
h_{FE-1}	DC Current Gain		$I_C = -1\text{A}; V_{CE} = -4\text{V}$	25		
h_{FE-2}	DC Current Gain		$I_C = -3\text{A}; V_{CE} = -4\text{V}$	10	50	
f_T	Current-Gain—Bandwidth Product		$I_C = -0.5\text{A}; V_{CE} = -10\text{V}$	3		MHz