

isc Silicon PNP Power Transistors

TIP32F

DESCRIPTION

- DC Current Gain $-h_{FE} = 25(\text{Min}) @ I_C = -1\text{A}$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR) CEO} = -160\text{V}(\text{Min})$
- Complement to Type TIP31F

APPLICATIONS

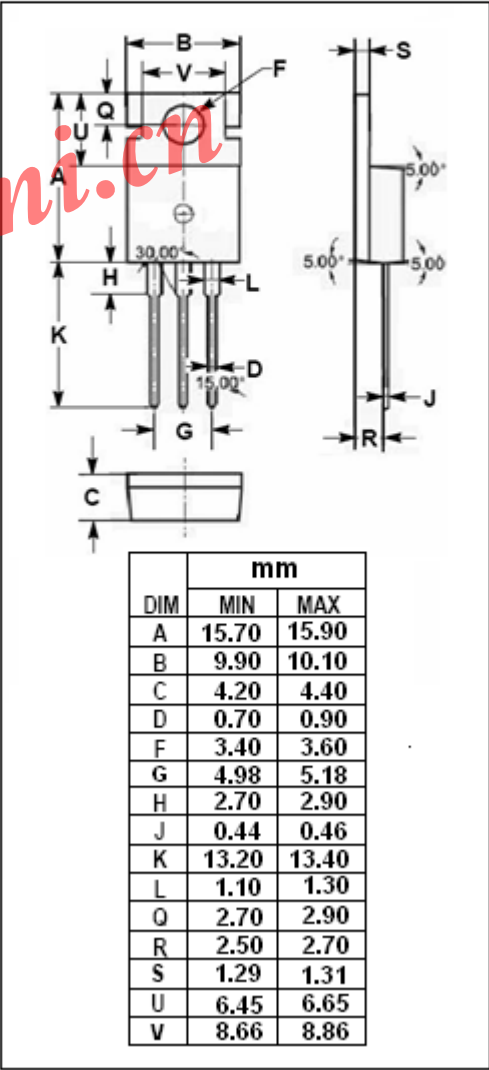
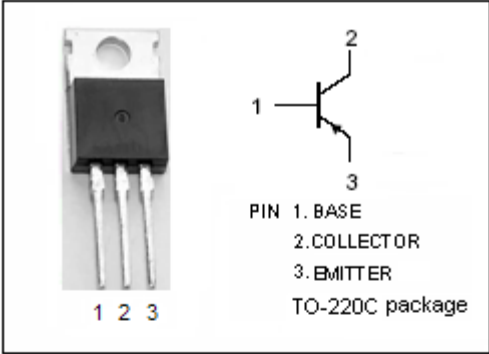
- Designed for use in general purpose amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-200	V
V_{CEO}	Collector-Emitter Voltage	-160	V
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
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Ttemperature Range	-65~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	3.125	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -30\text{mA}$; $I_B = 0$	-160		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3\text{A}$; $I_B = -0.75\text{A}$		-2.5	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	$V_{CE} = -200\text{V}$; $V_{EB} = 0$		-0.2	mA
I_{CEO}	Collector Cutoff Current	$V_{CE} = -90\text{V}$; $I_B = 0$		-0.3	mA
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	$I_C = -3\text{A}$; $V_{CE} = -4\text{V}$	5		
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$; $V_{CE} = -10\text{V}$	3		MHz