

isc Silicon PNP Power Transistors

TIP30B

DESCRIPTION

- · Collector-Emitter Sustaining Voltage-
- : $V_{CEO(SUS)} = -80V(Min)$
- · Collector-Emitter Saturation Voltage-
 - : $V_{CE(sat)} = -0.7V(Max.)@I_C = -1.0A$
- Complement to Type TIP29B
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

PIN 1. BASE 2.COLLECTOR 3. BMITTER 1 2 3 TO-220C package

APPLICATIONS

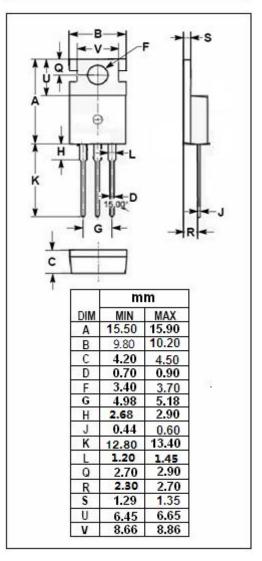
• Designed for use in general purpose amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-base Voltage	-80	V
VCEO	Collector-emitter Voltage	-80	V
V _{EBO}	Emitter-base Voltage	-5	V
Ic	Collector Current-Continuous	-1	Α
Ісм	Collector Current-Pulse	-3	Α
l _Β	Base Current	-0.4	Α
Pc	Collector Power Dissipation T_c =25°C	30	W
Tj	Junction Temperature	150	$^{\circ}$
T _{stg}	Storage Temperature Range	-65~150	${\mathbb C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	4.17	°C/W
R _{th j-a}	R _{th j-a} Thermal Resistance,Junction to Ambient		°C/W





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ELECTRICAL CHARACTERISTICS

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -30mA; I _B = 0	-80		V
VCE(sat)	Collector-Emitter Saturation Voltage	I _C = -1A; I _B = -0.125A		-0.7	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -1A; V _{CE} = -4V		-1.3	V
I _{CES}	Collector Cutoff Current	V _{CE} = -80V; V _{BE} = 0		-0.2	mA
Iceo	Collector Cutoff Current	V _{CE} = -80V; I _B = 0		-0.3	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0		-1.0	mA
h _{FE-1}	DC Current Gain	I _C = -0.2A; V _{CE} = -4V	40		
h _{FE-2}	DC Current Gain	I _C = -1A ; V _{CE} = -4V	15	75	
f⊤	Current-Gain—Bandwidth Product	I _C = -0.2A; V _{CE} = -10V; f= 1MHz	3		MHz

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