

**isc Silicon PNP Power Transistor**

**TIP36C**

**DESCRIPTION**

- DC Current Gain-  
:  $h_{FE} = 25(\text{Min}) @ I_C = -1.5\text{A}$
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(\text{SUS})} = -100\text{V}(\text{Min})$
- Complement to Type TIP35C
- Current Gain-Bandwidth Product-  
:  $f_T = 3.0\text{MHz}(\text{Min}) @ I_C = -1.0\text{A}$

**APPLICATIONS**

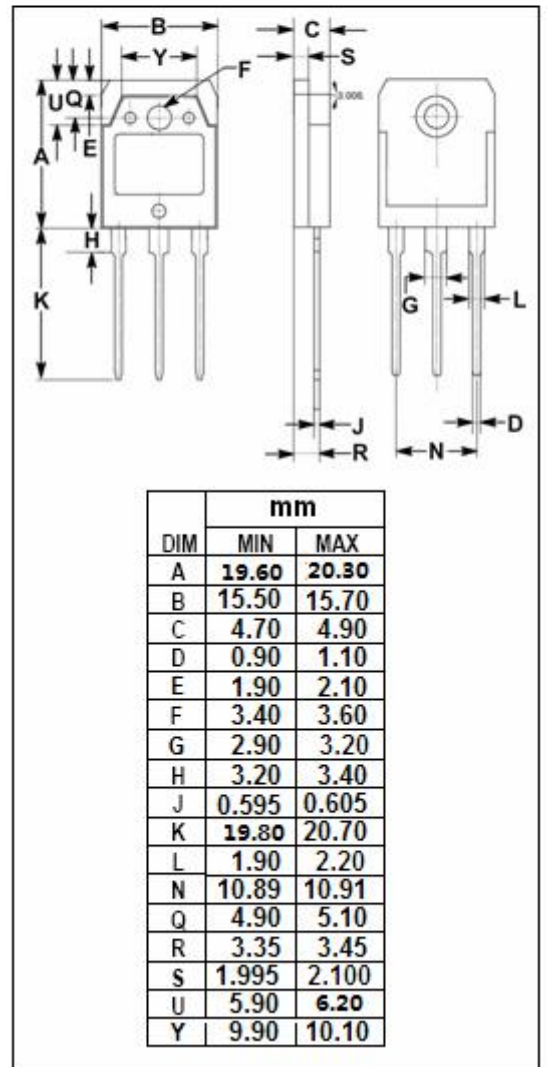
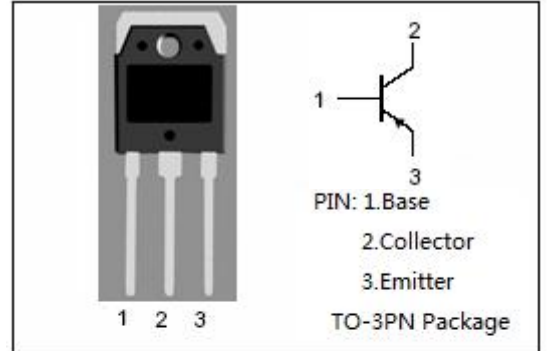
- Designed for use in general purpose power amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-25	A
$I_{CM}$	Collector Current-peak	-40	A
$I_B$	Base Current	-5	A
$P_C$	Collector Power Dissipation@ $T_c = 25^\circ\text{C}$	125	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ\text{C/W}$



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**ELECTRICAL CHARACTERISTICS**

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -30mA ; I <sub>B</sub> = 0	-100		V
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -15A ; I <sub>B</sub> = -1.5A		-1.8	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -25A ; I <sub>B</sub> = -5A		-4.0	V
V <sub>BE(on)-1</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -15A ; V <sub>CE</sub> = -4V		-2.0	V
V <sub>BE(on)-2</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -25A ; V <sub>CE</sub> = -4V		-4.0	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -60V ; I <sub>B</sub> = 0		-1.0	mA
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V ; I <sub>E</sub> = 0		-0.7	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V ; I <sub>C</sub> = 0		-1.0	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -1.5A ; V <sub>CE</sub> = -4V	25		
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -15A ; V <sub>CE</sub> = -4V	15	75	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -10V ; f <sub>test</sub> = 1.0MHz	3		MHz