

**isc Silicon NPN Power Transistor**
**ISCN366P**
**DESCRIPTION**

- DC Current Gain-  
:  $h_{FE} = 20-60 @ I_C = 0.5A$
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 400V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

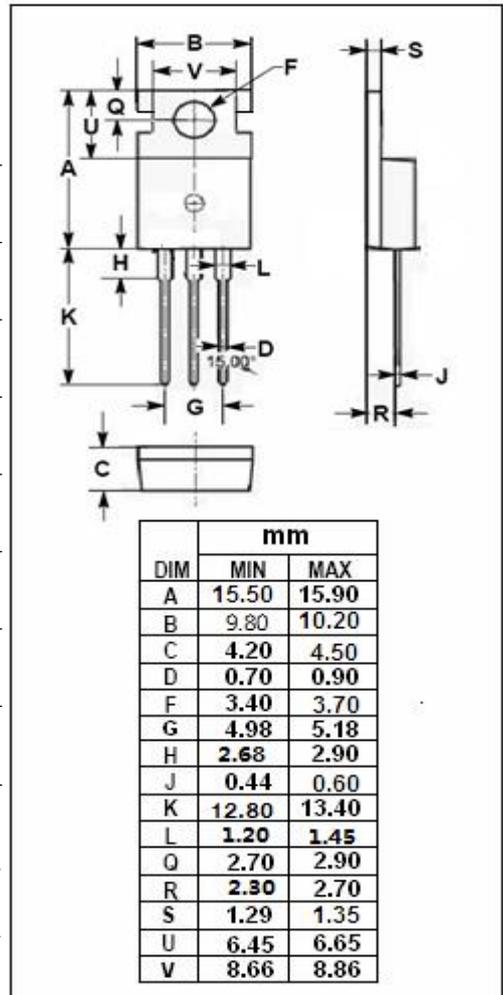
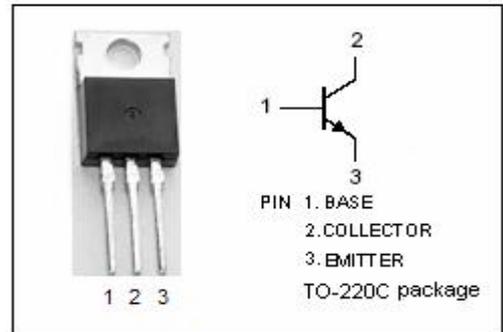
- Designed for use in general purpose power amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	800	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	10	V
$I_C$	Collector Current -Continuous	5.0	A
$P_C$	Collector Power Dissipation@ $T_C = 25^\circ\text{C}$	80	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~150	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.56	$^\circ\text{C}/\text{W}$



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 30mA ; I <sub>B</sub> = 0	400		V
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A ; I <sub>B</sub> = 0.4A		0.5	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 4A ; I <sub>B</sub> = 0.8A		1.0	V
V <sub>BE(on)-1</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 2A ; I <sub>B</sub> = 0.4A		1.1	V
V <sub>BE(on)-2</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 4A ; I <sub>B</sub> = 0.8A		1.3	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 400V ; I <sub>B</sub> = 0		50	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 10V ; I <sub>C</sub> = 0		1.0	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.5A ; V <sub>CE</sub> = 5V	20	60	

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