

# **isc Silicon NPN Power Transistor**

# 2SC2815

### DESCRIPTION

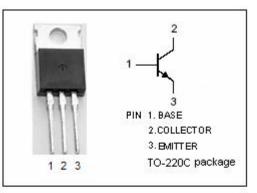
- Low Collector Saturation Voltage
- · Good Linearity of hFE
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

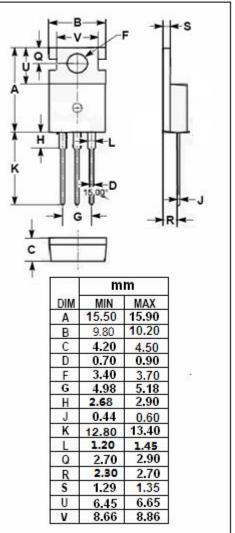
#### **APPLICATIONS**

• Designed for use in humidifier , DC/DC converter and general purpose applications

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	300	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	250	V	
$V_{\text{EBO}}$	Emitter-Base Voltage	6	V	
lc	Collector Current-Continuous	5	А	
I <sub>СМ</sub>	Collector Current-Pulse	10	A	
IB	Base Current-Continuous	2	А	
Pc	Collector Power Dissipation @ $T_c$ =25°C	40	W	
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C	





## isc Website: <u>www.iscsemi.cn</u>



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### **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0	250			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 4A; I <sub>B</sub> = 0.4A			1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 4A; I <sub>B</sub> = 0.4A			1.2	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 300V; I <sub>E</sub> = 0			100	μ Α
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =6V; I <sub>C</sub> = 0			100	μA
h <sub>FE</sub>	DC Current Gain	Ic= 2.5A ; Vce= 5V	40			

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