



# **ISC Silicon NPN Power Transistor**

### **DESCRIPTION**

- · Collector-Emitter Sustaining Voltage-
  - : V<sub>CEO(SUS)</sub>= 800V(Min)
- · Fast Switching speed
- 100% avalanche tested
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **APPLICATIONS**

Color TV horizontal output applications



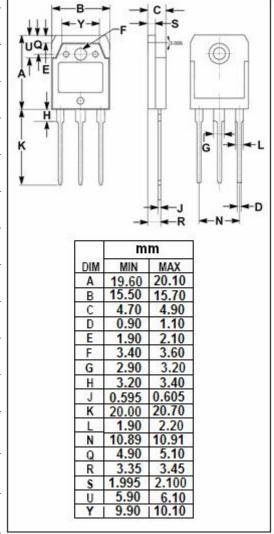
# PIN 1. BASE 2.COLLECTOR 3. BMITTER TO-3PN package

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	1200	V
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V
V <sub>EBO</sub>	Emitter-Base Voltage	7	V
lc	Collector Current-Continuous	6	А
I <sub>CM</sub>	Collector Current-Peak	12	А
lв	Base Current-Continuous	3	А
Івм	Base Current-Peak	6	А
Pc	Collector Power Dissipation @ T <sub>C</sub> =25℃	100	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case		°C/W





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2SC4236

## **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT		
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 0.2A; I <sub>B</sub> = 0	800			V		
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	Ic= 3A; I <sub>B</sub> = 0.6A			1.0	V		
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 3A; I <sub>B</sub> = 0.6A			1.5	V		
I <sub>CBO</sub>	Collector Cutoff Current	At rated Voltage			100	μА		
ICEO	Collector Cutoff Current	At rated Voltage			100	μА		
I <sub>EBO</sub>	Emitter Cutoff Current	At rated Voltage			100	μА		
h <sub>FE-1</sub>	DC Current Gain	Ic= 3A; VcE= 5V	8					
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 1mA; V <sub>CE</sub> = 5V	7					
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.6A; V <sub>CE</sub> = 10V		8		MHz		
Switching times								
t <sub>on</sub>	Turn-on Time				0.5	μS		
t <sub>stg</sub>	Storage Time	I <sub>C</sub> = 3A , I <sub>B1</sub> = 0.6A; I <sub>B2</sub> = -1.2A R <sub>L</sub> = 85 Ω ; V <sub>BB2</sub> = 4V			3.5	μS		
t <sub>f</sub>	Fall Time				0.3	μs		

## **NOTICE:**

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