

# isc Silicon NPN Power Transistor

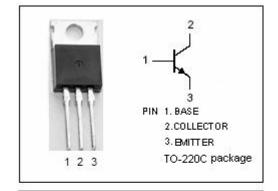
2SC1061

### **DESCRIPTION**

- · Low Collector Saturation Voltage-
  - $V_{CE(sat)} = 1.0(V)(Max)@I_{C} = 2A$
- DC Current Gain-
  - : h<sub>FE</sub>= 35-320 @ I<sub>C</sub>= 0.5A
- · Complement to Type 2SA671
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **APPLICATIONS**

 Designed for use in low frequency power amplifier applications.

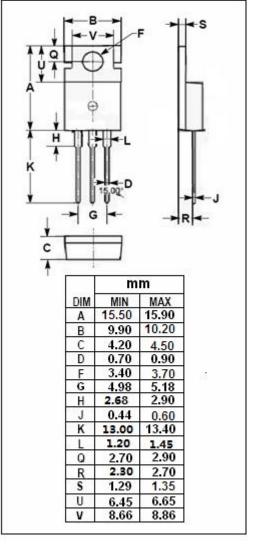


# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
$V_{\text{CBO}}$	Collector-Base Voltage	50	V
$V_{\text{CEO}}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	4	V
Ic	Collector Current-Continuous	3	А
I <sub>CM</sub>	Collector Current-Peak	8	Α
I <sub>B</sub>	Base Current-Continuous	0.5	Α
Pc	Total Power Dissipation @ T <sub>C</sub> =25°C	25	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~150	${\mathbb C}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5.0	°C/W





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#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 50mA ; I <sub>B</sub> = 0	50			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 5mA ; I <sub>E</sub> = 0	50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 5mA ; I <sub>C</sub> = 0	4			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	Ic= 2A; I <sub>B</sub> = 0.2A			1.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 1A; V <sub>CE</sub> = 4V			1.5	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = 20V ; I <sub>E</sub> = 0			100	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			100	μА
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 4V	35			
h <sub>FE-2</sub>	DC Current Gain	Ic= 1A; VcE= 4V	35		320	

### h<sub>FE-2</sub> Classifications

Α	В	С	D
35-70	60-120	100-200	160-320

## **NOTICE:**

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