

# isc Silicon PNP Power Transistor

2SB1370

### **DESCRIPTION**

- · Low Collector Saturation Voltage-
  - : V<sub>CE(sat)</sub>= -0.3V(Typ.)@I<sub>C</sub>= -2A
- · Good Linearity of hFE
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

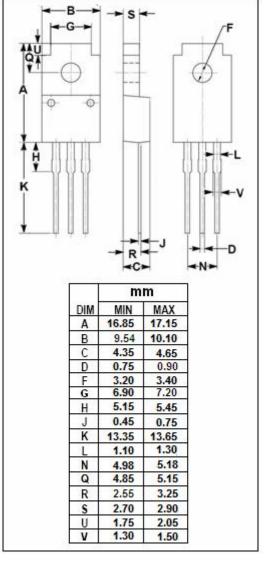


### **APPLICATIONS**

· Designed for power switching applications

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	-60	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-60	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
Ic	Collector Current-Continuous -3		А	
Ісм	Collector Current-Peak -6		А	
P <sub>C</sub>	Collector Power Dissipation @ T <sub>a</sub> =25℃	2	W	
	Collector Power Dissipation @ Tc=25℃	30		
TJ	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature Range -55~150		$^{\circ}$ C	





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#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>B</sub> = 0	-60			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0	-60			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -50 μ <b>A</b> ; I <sub>C</sub> = 0	-5			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.5	V
$V_{\text{BE}(\text{sat})}$	Base-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -60V; I <sub>E</sub> = 0			-10	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-10	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V	100		320	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> =-0.5A; V <sub>CE</sub> = -5V; f <sub>test</sub> = 5MHz		15		MHz

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