

# isc Silicon NPN Power Transistor

### **DESCRIPTION**

- Collector-Emitter Breakdown Voltage
  - : V<sub>(BR)CEO</sub>= 30V(Min)
- · Good Linearity of hFE
- Complement to Type 2SA1276
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

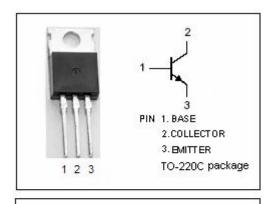


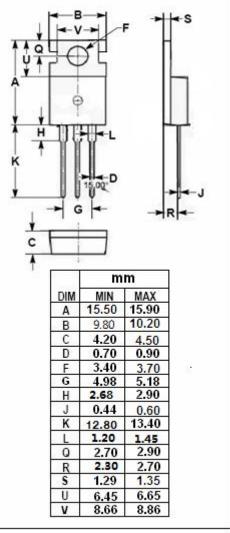
### **APPLICATIONS**

· Designed for general purpose applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>СВО</sub>	Collector-Base Voltage	V	
Vceo	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	5	V
lc	Collector Current-Continuous	3	А
le	Emitter Current-Continuous	-3	Α
Pc	Total Power Dissipation @ T <sub>C</sub> =25℃	10	W
TJ	Junction Temperature 150		$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range -55		$^{\circ}$ C







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2SC3230

### **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> = 10mA ; I <sub>B</sub> = 0	30			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.2A			0.8	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 2V			1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 20V; I <sub>E</sub> = 0			1.0	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			1.0	μА
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 2V	70		240	
h <sub>FE-2</sub>	DC Current Gain	Ic= 2.5A; VcE= 2V	25			
f⊤	Current-Gain—Bandwidth Product	Ic= 0.5A; VcE= 2V		100		MHz
Сов	Output Capacitance	I <sub>E</sub> =0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1.0MHz		35		pF

## ♦ h<sub>FE-1</sub> Classifications

0	Y	
70-140	120-240	

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