

# **isc Silicon NPN Power Transistor**

### **DESCRIPTION**

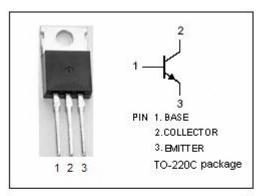
- Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 120V(Min)
- · Low Collector-Emitter Saturation Voltage-
  - : V<sub>CE(sat)</sub>= 1.0V(Max) @I<sub>C</sub>= 0.7A
- Complement to Type 2SA1078
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

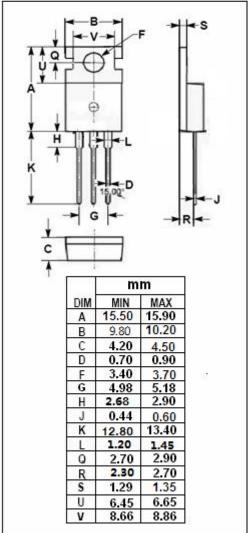


 High frequency power amplifier, Audio power amplifier
 Dirvers

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	120	V
V <sub>CEO</sub>	Collector-Emitter Voltage	120	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
Ic	Collector Current-Continuous	2.0	А
Pc	Collector Power Dissipation @ T <sub>C</sub> =25 °C	25	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-65~150	$^{\circ}$





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2SC2528

### **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	120			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA ; I <sub>C</sub> = 0	6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 0.7A; I <sub>B</sub> = 0.07A			1.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 0.7A ; V <sub>CE</sub> = 5V			1.7	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 120V ; I <sub>E</sub> = 0			1	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V ; I <sub>C</sub> = 0			1	μА
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 0.3A ; V <sub>CE</sub> = 5V	60		350	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 0.7A; V <sub>CE</sub> = 5V	50			
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 10V;f <sub>test</sub> = 10MHz		60		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 20V;f <sub>test</sub> = 1.0MHz		60		pF

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