

### **isc Silicon NPN Power Transistor**

### 2SD556

#### DESCRIPTION

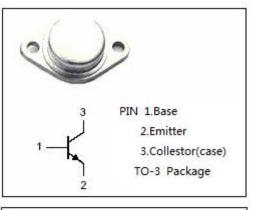
- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= 110V (Min)
- Wide Area of Safe Operation
- High Power
- High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

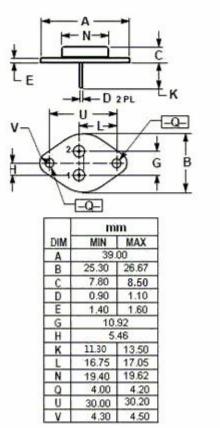
#### APPLICATIONS

• Designed for high power AF amplifier applications.

SYMBOL	PARAMETER	МАХ	UNIT	
Vсво	Collector-Base Voltage	110	V	
Vceo	Collector-Emitter Voltage	110	V	
V <sub>EBO</sub>	Emitter-Base Voltage	6	V	
lc	Collector Current-Continuous	15	A	
IB	Base Current-Continuous	20	A	
Pc	Collector Power Dissipation @Tc=25℃	120	W	
Tj	Junction Temperature	175	°C	
T <sub>stg</sub>	Storage Temperature Range	-65~175	°C	

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)







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### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0	110			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> = 5Α; I <sub>B</sub> = 0.5Α			1.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 5A ; V <sub>CE</sub> = 4V			1.5	V
І <sub>сво</sub>	Collector Cutoff Current	V <sub>CB</sub> = 110V; I <sub>E</sub> = 0			0.1	mA
І <sub>ЕВО</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V; I <sub>C</sub> =0			0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 4V	60		200	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 5A ; V <sub>CE</sub> = 4V	30		120	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A;V <sub>CE</sub> = 10V		8		MHz

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