

# **ISC Silicon NPN Power Transistor**

2SD1180

### **DESCRIPTION**

- · High Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 110V (Min)
- Low collector saturation voltage
- With TO-126 package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

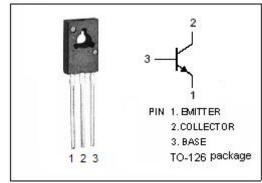


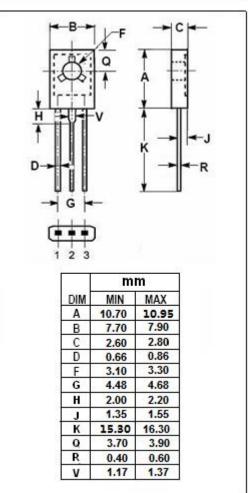
#### **APPLICATIONS**

 Designed for use in audio and radio frequency power amplifiers applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	120	V	
Vceo	Collector-Emitter Voltage	110	V	
V <sub>EBO</sub>	Emitter-Base Voltage	6	V	
Ic	Collector Current-Continuous	1.5	А	
I <sub>CM</sub>	Collector Current-Peak	2.5	А	
P <sub>C</sub>	Collector Power Dissipation @ T <sub>a</sub> =25°C	1.2	W	
	Collector Power Dissipation @ Tc=25℃	20		
TJ	Junction Temperature	150	°C	
Tstg	Storage Temperature Range	-55~150	°C	







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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> = 10mA; R <sub>BE</sub> = ∞	100			V
V <sub>(BR)</sub> CBO	Collector-base breakdown voltage	Ic=100μA; I <sub>E</sub> =0	120			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 0.1mA; I <sub>C</sub> = 0	5			V
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.2A			0.7	V
V <sub>BE(sat))</sub>	Base-emitter saturation voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.2A			1.3	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 120V; I <sub>E</sub> = 0			1	μА
Ієво	Emitter cut-off current	V <sub>EB</sub> =3V; I <sub>C</sub> =0			1	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> =150mA; V <sub>CE</sub> = 5V	100			

## **NOTICE:**

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