

## **isc** Silicon NPN Power Transistor

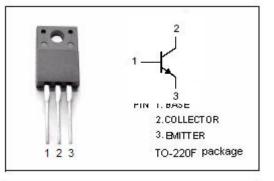
# 2SD2058

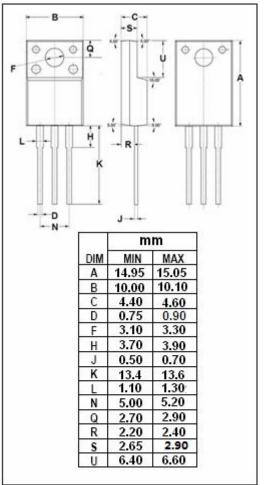
#### DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 60V (Min)
- Collector Power Dissipation
  - : P<sub>C</sub>= 25 W(Max)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### **APPLICATIONS**

Designed for low frequency power amplifier 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	7	V
lc	Collector Current-Continuous	3	A
IB	Base Current-Continuous	0.5	A
Pc	Collector Power Dissipation @T <sub>C</sub> =25℃	25	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	°C



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## ELECTRICAL CHARACTERISTICS

### Tj=25 $^{\circ}\!\!\!\!\!^{\circ}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 30mA; I <sub>B</sub> = 0	60			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 0.2A			1.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 5V			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 60V; I <sub>E</sub> = 0			10	μ Α
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 7V; I <sub>C</sub> = 0			1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 5V	60		300	
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1MHz		35		pF
fT	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 5V		3		MHz

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