

## **isc Silicon NPN Power Transistor**

# 2SD1562

### DESCRIPTION

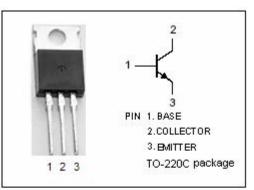
- Collector-Emitter Breakdown Voltage-: V<sub>(BR)CEO</sub>= 120V (Min)
- Wide Area of Safe Operation
- Complement to Type 2SB1085
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

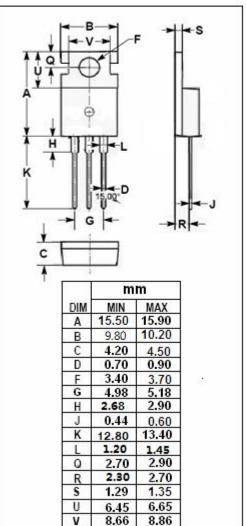
### **APPLICATIONS**

• Designed for low frequency power amplifier applications.

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	120	V
V <sub>CEO</sub>	Collector-Emitter Voltage	120	V
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V
lc	Collector Current-Continuous	1.5	А
I <sub>CM</sub>	Collector Current-Peak	3	A
Pc	Total Power Dissipation @ T <sub>c</sub> =25℃	20	
	Total Power Dissipation @ Ta=25℃	1.5	W
TJ	Junction Temperature	150	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C







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### **ELECTRICAL CHARACTERISTICS**

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	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)CBO</sub>	Collector-Base Breakdown Voltage	ge I <sub>C</sub> = 50 μ Α; I <sub>E</sub> = 0				V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 50 μ A; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.1A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.1A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 100V; I <sub>E</sub> = 0			1.0	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			1.0	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 5V	60		320	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 5V		80		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1MHz		20		pF

#### h<sub>FE</sub> Classifications

D	E	F
60-120	100-200	160-320

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