



## isc Silicon PNP Power Transistor

#### **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= -60V(Min)
- · Collector Power Dissipation-
  - :  $P_C$ = 25 W@  $T_C$ = 25  $^{\circ}$ C
- Low Collector Saturation Voltage
- · Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

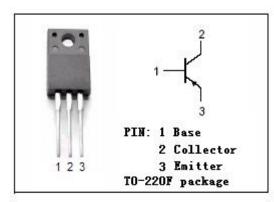


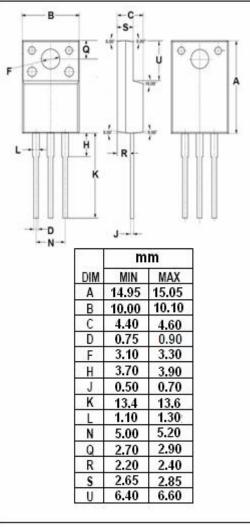
• Designed for power amplifications.



### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
$V_{CBO}$	Collector-Base Voltage	-80	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-60	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-7	V	
Ic	Collector Current-Continuous	-3	Α	
I <sub>CM</sub>	Collector Current-Peak	-6	Α	
	Collector Power Dissipation @T <sub>a</sub> =25°C	2		
Pc	Collector Power Dissipation @T <sub>C</sub> =25 °C	25	5 W	
TJ	Junction Temperature 150		$^{\circ}$	
T <sub>stg</sub>	Storage Temperature -58		$^{\circ}$	







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2SB1565

### **ELECTRICAL CHARACTERISTICS**

Tj=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	-60			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0	-80			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -50 μ A; I <sub>C</sub> = 0	-7			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(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -60V; I <sub>E</sub> = 0			-10	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -7V; I <sub>C</sub> = 0			-10	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V	100		320	
f⊤	Current-Gain—Bandwidth Product	Ic= -0.5A;V <sub>CE</sub> = -5V; f <sub>test</sub> = 5MHz		15		MHz
Сов	Collector Output Capacitance	I <sub>E</sub> = 0;V <sub>CE</sub> = -10V; f <sub>test</sub> = 1MHz		50		pF

# ♦ h<sub>FE</sub> Classifications

Е	F		
100-200	160-320		



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