



# isc Silicon PNP Darlington Power Transistor

#### **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -80V(Min)
- · High DC Current Gain-
- : h<sub>FE</sub>= 1000(Min)@ (V<sub>CE</sub>= -3V, I<sub>C</sub>= -2A)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

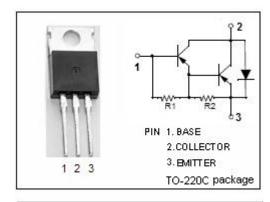


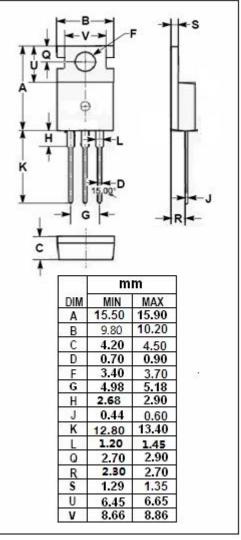
## **APPLICATIONS**

· Designed for power amplifier applications.

## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
Vсво	Collector-Base Voltage	-80	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-80	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-7	V	
lc	Collector Current-Continuous	-4	А	
I <sub>CM</sub>	Collector Current-Peak	-6	А	
P <sub>C</sub>	Collector Power Dissipation @T <sub>a</sub> =25℃	2	W	
	Collector Power Dissipation @Tc=25℃	35	V V	
TJ	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$	







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2SB1341

### **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	-80			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>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -4mA			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -80V ; I <sub>E</sub> = 0			-100	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-3	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -2A ; V <sub>CE</sub> = -3V	1000		10000	
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1MHz		45		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.5A ; V <sub>CE</sub> = -5V; f <sub>test</sub> = 10MHz		12		MHz

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