

## isc Silicon NPN Power Transistor

## **DESCRIPTION**

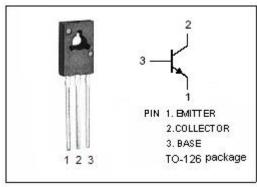
- High Collector Current I<sub>C</sub>= 1.5A
- · Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= 25V(Min)
- Good Linearity of h<sub>FE</sub>
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

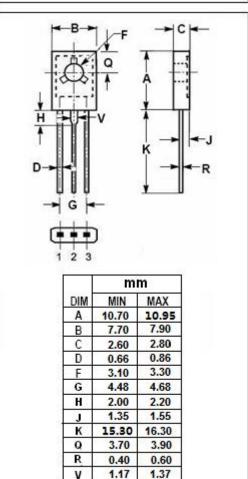


• Designed for low frequency power amplifier applications.



SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	25	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V	
$V_{EBO}$	Emitter-Base Voltage	5	V	
Ic	Collector Current-Continuous	1.5	А	
P <sub>C</sub>	Collector Power Dissipation @ $T_C$ =25 $^{\circ}$ C	8	W	
	Collector Power Dissipation @ T <sub>a</sub> =25℃	0.75		
TJ	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$	







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2SC1368

## **ELECTRICAL CHARACTERISTICS**

 $T_C=25$ °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 1mA ; I <sub>E</sub> = 0	25			V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	$I_{C}$ = 10mA; $R_{BE}$ = $\infty$	25			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown VItage	I <sub>E</sub> = 1mA ; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1.5A; I <sub>B</sub> = 0.15A			0.8	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 25V; I <sub>E</sub> = 0			1.0	μА
h <sub>FE</sub>	DC Current Gain	Ic= 500mA ; VcE= 2V	60		320	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 500mA ; V <sub>CE</sub> = 5V		180		MHz



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