

# **isc Silicon NPN Power Transistor**

### **DESCRIPTION**

- High voltage and large current capacity
- Fast-speed switching
- Small and slim package permitting 2SC4134-applied sets to be made more compact
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

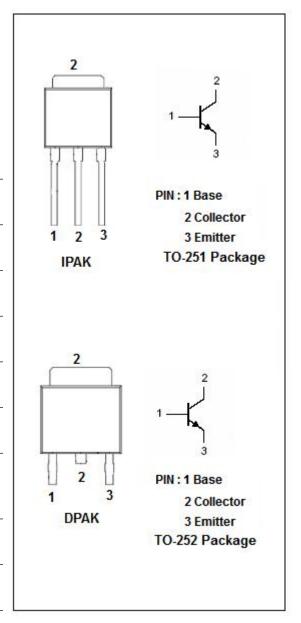


### **APPLICATIONS**

Power supplies, relay drivers, lamp drivers

## 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	100	V	
V <sub>EBO</sub>	Emitter-Base Voltage	6	V	
Ic	Collector Current-Continuous	1	А	
Ісм	Collector Current-Peak	2	А	
P <sub>C</sub>	Collector Power Dissipation @ T <sub>c</sub> =25°C	10	W	
	Collector Power Dissipation @T <sub>a</sub> =25℃	0.8		
TJ	Junction Temperature		${\mathbb C}$	
T <sub>stg</sub>	T <sub>stg</sub> Storage Temperature Range		$^{\circ}$	





# **isc Silicon NPN Power Transistor**

2SC4134

### **ELECTRICAL CHARACTERISTICS**

 $T_{\text{C}}$ =25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 0.4A; I <sub>B</sub> = 40mA			0.4	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 0.4A; I <sub>B</sub> = 40mA			1.2	V
V <sub>(BR)</sub> CEO	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 1mA; I <sub>B</sub> = 0	100			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 10uA; I <sub>C</sub> = 0	6			V
І <sub>СВО</sub>	Collector Cutoff Current	V <sub>CB</sub> = 100V; I <sub>E</sub> = 0			0.1	μА
І <sub>ЕВО</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			0.1	μА
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 5V	100		400	
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f= 1.0MHz		8.5		pF
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 100mA; V <sub>CE</sub> = 10V		120		MHz

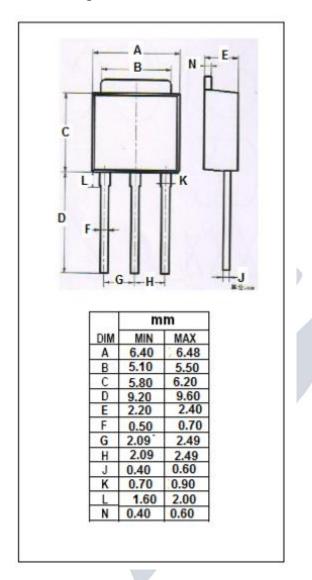
# h<sub>FE</sub> Classifications

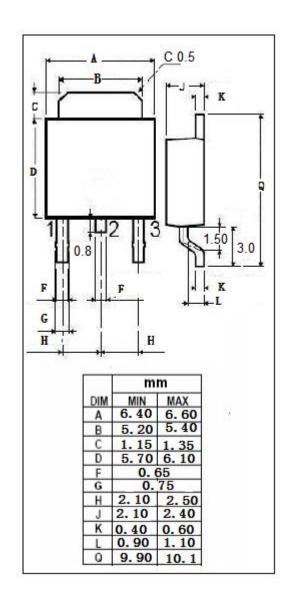
R	S	T
100-200	140-280	200-400



## isc Silicon NPN Power Transistor

## **Outline Drawing**





### **NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.