

## **isc** Silicon PNP Power Transistor

# 2SA2151

### DESCRIPTION

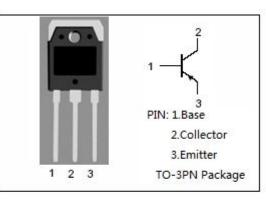
- High Collector-Emitter Breakdown Voltage-V<sub>(BR)CEO</sub>= -200V(Min)
- Good Linearity of h<sub>FE</sub>
- Complement to Type 2SC6011
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

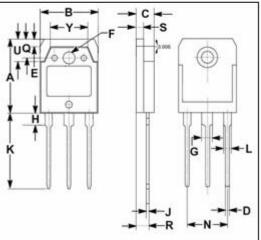
#### **APPLICATIONS**

· Designed for audio and general purpose applications

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	-200	V	
Vceo	Collector-Emitter Voltage	-200	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-6	V	
lc	Collector Current-Continuous	-15	A	
I <sub>B</sub>	Base Current-Continuous	-4	A	
Pc	Collector Power Dissipation @ $T_C$ =25°C	160	W	
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C	





	m	m
DIM	MIN	MAX
Α	19.60	20.30
В	15.50	15.70
С	4.70	4.90
D	0.90	1.10
Ε	1.90	2.10
F	3.40	3.60
G	2.90	3.20
Н	3.20	3.40
J	0.595	0.605
Κ	19.80	20.70
L	1.90	2.20
Ν	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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## **ELECTRICAL CHARACTERISTICS**

 $T_{c}\text{=}25^{\circ}\!\!\!\mathrm{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -50mA ; I <sub>B</sub> = 0	-200			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -5A; I <sub>B</sub> = -0.5A			-0.5	V
І <sub>сво</sub>	Collector Cutoff Current	V <sub>CB</sub> = -200V ; I <sub>E</sub> = 0			-10	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> = 0			-10	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -3A ; V <sub>CE</sub> = -4V	50		180	
Сов	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = -10V;f= 1.0MHz		450		pF
fT	Current-Gain—Bandwidth Product	IE= 0.5A ; VCE= -12V		20		MHz

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

0	Р	Y
50-100	70-140	90-180

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