

**isc Silicon NPN Power Transistor**
**BD107**
**DESCRIPTION**

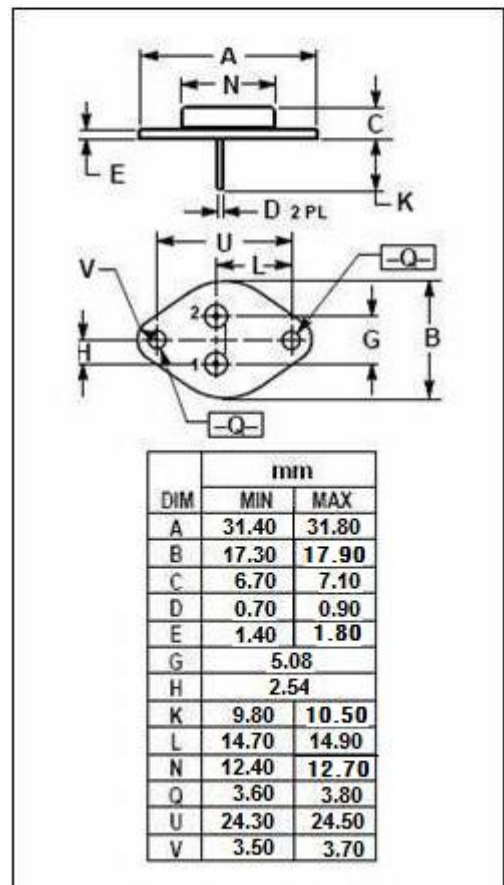
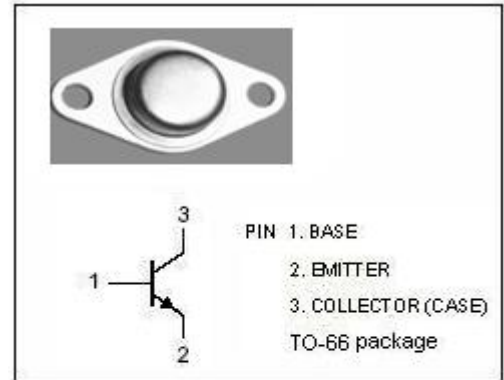
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 65V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for driver and output stages and high Power switching

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	65	V
$V_{CEO}$	Collector-Emitter Voltage	65	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	2.5	A
$P_C$	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	12	W
$T_J$	Junction Temperature	175	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~175	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****BD107****ELECTRICAL CHARACTERISTICS****T<sub>c</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(SUS)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0			60	V
V <sub>CE(SAT)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2.5A; V <sub>CE</sub> = 0.25A			1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 60V; I <sub>E</sub> = 0			0.5	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =5V; I <sub>C</sub> = 0			0.5	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 2V	50		300	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 2V	35			

◆ **h<sub>FE-1</sub> Classifications**

A	B
50-150	100-300

**NOTICE:**

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