

**isc Silicon NPN Power Transistor**
**BDX60**
**DESCRIPTION**

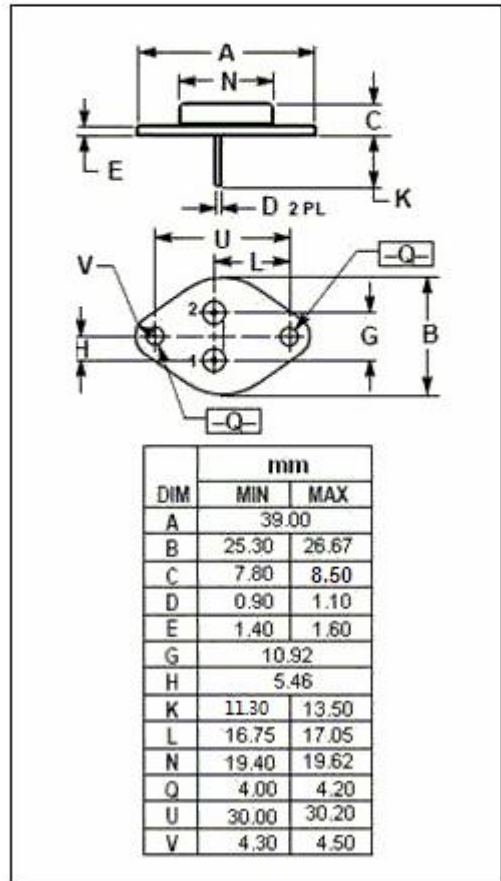
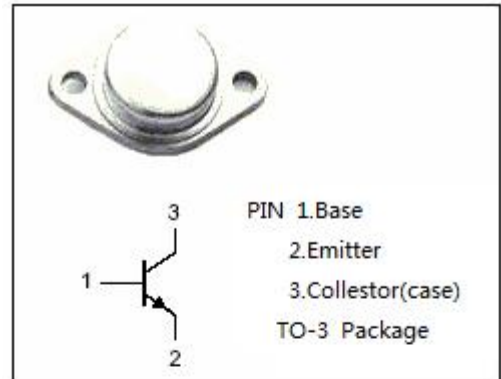
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 70V$  (Min)
- High Current Capability
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for general-purpose power amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	100	V
$V_{CEO}$	Collector-Emitter Voltage	70	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	15	A
$I_{CM}$	Collector Current-Peak	20	A
$I_B$	Base Current-Continuous	5	A
$P_C$	Collector Power Dissipation	150	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ C$



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**ELECTRICAL CHARACTERISTICS**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)-1</sub>	Collector-Emitter Saturation Voltage	I <sub>c</sub> =5A; I <sub>B</sub> = 0.5A			1.0	V
V <sub>CE(sat)-2</sub>	Collector-Emitter Saturation Voltage	I <sub>c</sub> = 10A; I <sub>B</sub> = 1A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>c</sub> =5A; I <sub>B</sub> = 0.5A			1.5	V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>c</sub> = 30mA; I <sub>B</sub> = 0	70			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	7			V
h <sub>FE-1</sub>	DC Current Gain	I <sub>c</sub> =1A; V <sub>CE</sub> = 5V	60			
h <sub>FE-2</sub>	DC Current Gain	I <sub>c</sub> =15A; V <sub>CE</sub> = 5V	20		70	
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> =100V ; I <sub>E</sub> = 0			100	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =6V; I <sub>C</sub> = 0			100	uA
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>c</sub> = 0.5A; V <sub>CE</sub> = 10V; f <sub>test</sub> = 1.0MHz	3			MHz

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