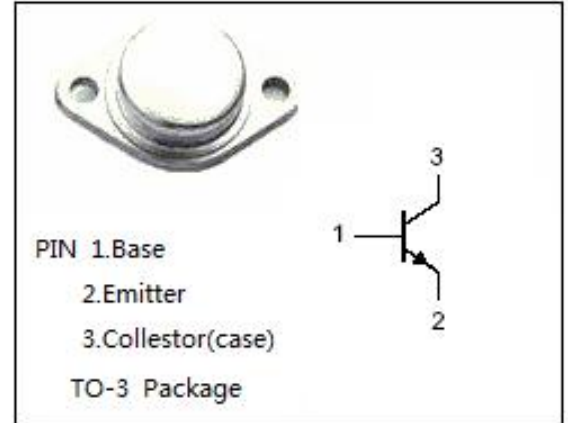


isc Silicon NPN Power Transistor
3DD207
DESCRIPTION

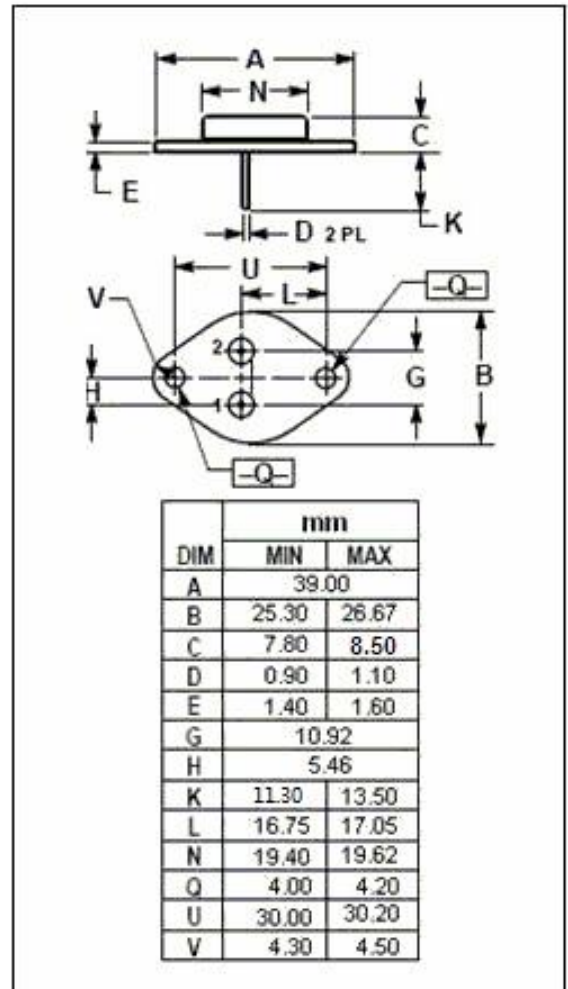
- With TO-3 packaging
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	60	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	5	A
P _D	Total Power Dissipation@T _c =75°C	50	W
T _J	Max.Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal Resistance,Junction to Case	1.5	°C/W

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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV _{CBO}	Collector-Base Sustaining Voltage	I _C = 50mA; I _E = 0	60		V
BV _{CEO}	Collector-Emitter Sustaining Voltage	I _C = 1mA; I _B = 0	60		V
BV _{EBO}	Emitter-Base Sustaining Voltage	I _E = 1mA; I _C =0	6		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.3A		1.0	V
V _{BE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.3A		1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} =60V; I _E = 0		0.5	mA
I _{EBO}	Collector Cutoff Current	V _{CB} =6V; I _C = 0		0.1	mA
h _{FE}	DC Current Gain	I _C = 2A; V _{CE} = 5V	40	250	

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