

isc Silicon NPN Power Transistor

3DD9A

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

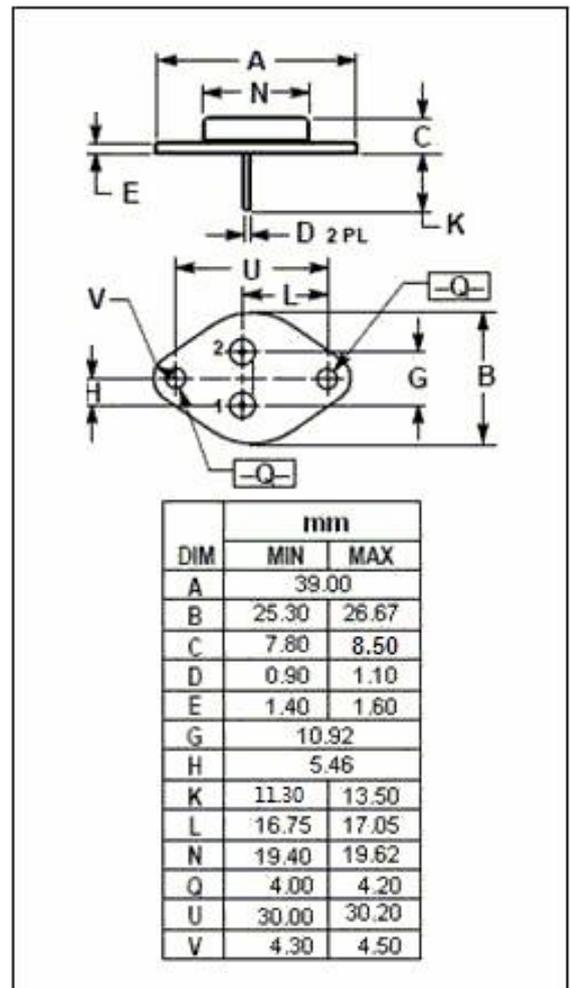
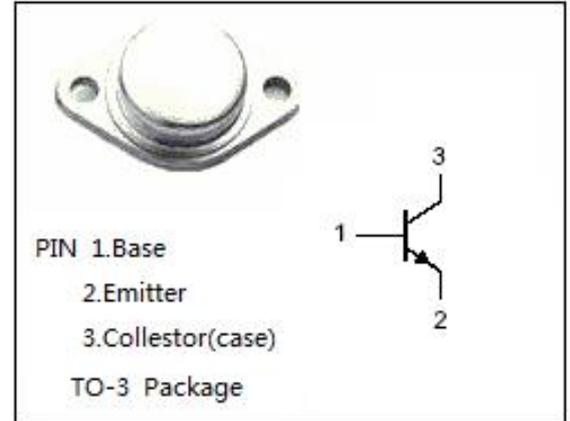
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	15	A
P _D	Total Power Dissipation@T _c =75°C	150	W
T _J	Max.Junction Temperature	175	°C
T _{stg}	Storage Temperature	-55~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal Resistance,Junction to Case	0.66	°C/W



isc Silicon NPN Power Transistor**3DD9A****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV _{CBO}	Collector-Base Sustaining Voltage	I _C = 10mA; I _E = 0	50		V
BV _{CEO}	Collector-Emitter Sustaining Voltage	I _C = 5mA; I _B = 0	50		V
BV _{EBO}	Emitter-Base Sustaining Voltage	I _E = 10mA; I _C =0	5		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7.5A; I _B = 0.75A		1.5	V
V _{BE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7.5A; I _B = 0.75A		1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} =30V; I _E = 0		2.0	mA
h _{FE}	DC Current Gain	I _C = 7.5A; V _{CE} = 5V	15	120	

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