

isc Silicon PNP Power Transistors

3CD9A

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

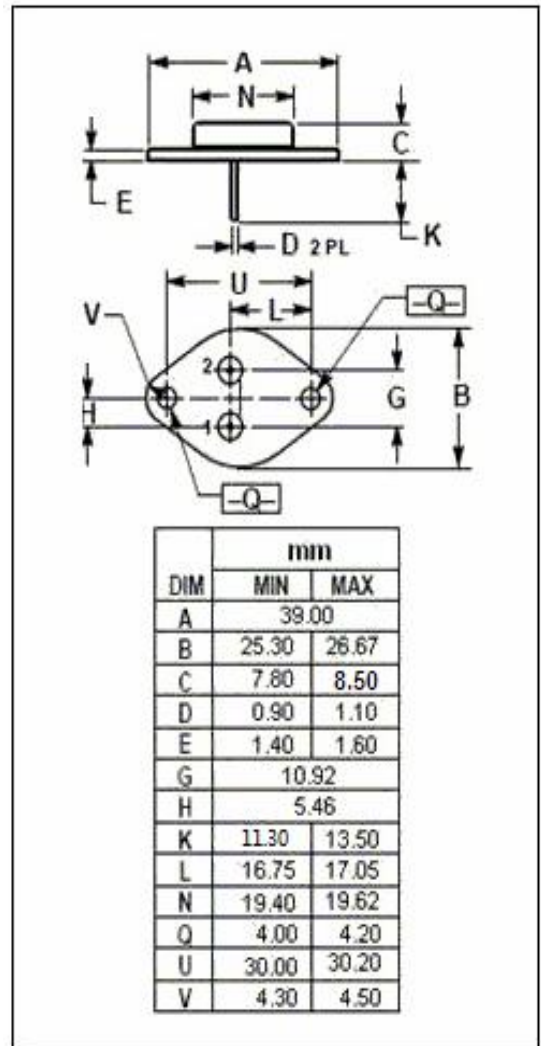
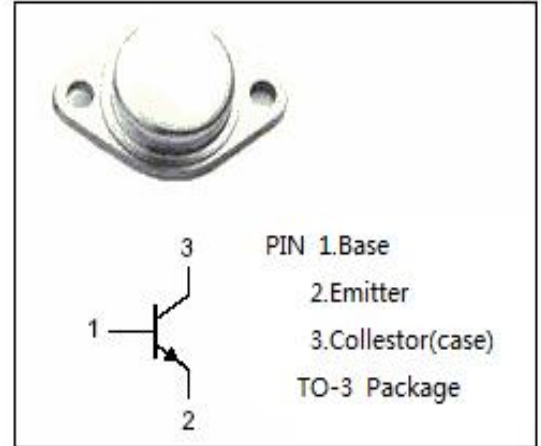
- Designed for use in DC-DC converter
- Driver of solenoid or motor

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	-30	V
V _{CEO}	Collector-Emitter Voltage	-30	V
V _{EBO}	Emitter-Base Voltage	-4	V
I _c	Collector Current-Continuous	-15	A
P _c	Collector Power Dissipation@T _c =75°C	150	W
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

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



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(BR)}$	Collector-Emitter Breakdown Voltage	$I_C=-10\text{mA}; I_B=0$	-30		V
$V_{EBO(BR)}$	Emitter-Base Breakdown Voltage	$I_E=-10\text{mA}; I_C=0$	-4		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-7.5\text{A}; I_B=-1.5\text{A}$		-2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-7.5\text{A}; I_B=-1.5\text{A}$		-2	V
I_{CEO}	Collector Cutoff Current	$V_{CE}=-30\text{V}; I_B=0$		-3.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}=-30\text{V}; I_E=0$		-1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=-4\text{V}; I_C=0$		-1.0	mA
h_{FE}	DC Current Gain	$I_C=-7.5\text{A}; V_{CE}=-10\text{V}$	10	180	