

isc Silicon PNP Power Transistors

3CD3C

DESCRIPTION

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

APPLICATIONS

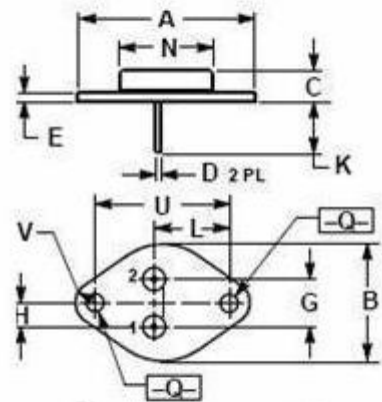
- Designed for use in DC-DC converter
- Driver of solenoid or motor

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current-Continuous	-1	A
P_C	Collector Power Dissipation@ $T_c=75^{\circ}\text{C}$	10	W
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	12.5	$^{\circ}\text{C/W}$



DIM	mm	
	MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

isc Silicon PNP Power Transistors**3CD3C****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C =- 3mA ; I _B = 0	-80		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E =- 3mA ; I _C = 0	-4		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =- 0.5A; I _B = -0.1A		-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -0.5A; I _B = -0.1A		-1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} =- 80V; I _B = 0		-1.0	mA
I _{CBO}	Collector Cutoff Current	V _{CB} =- 80V; I _E = 0		-1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V; I _C = 0		-1.0	mA
h _{FE}	DC Current Gain	I _C = -0.5A; V _{CE} =-10V	10	180	

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