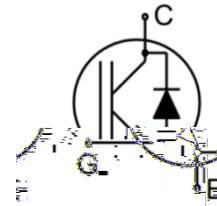




O <sub>L</sub>	/.)O
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- M g a i b l M a g h e
- Abali i l n a l g
- Eh Zm aZk Zg O I Zm
- High ruggedness, temperature stable behavior
- F Z b n f a n g r b g m f i k Z m k . )



- A n f : i i e Z g : i i e Z h g
- Fan, Pumps, Vacuum Cleaner
- Motor drives
- Other Hard Switching Applications

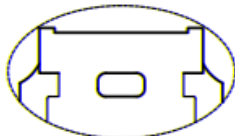
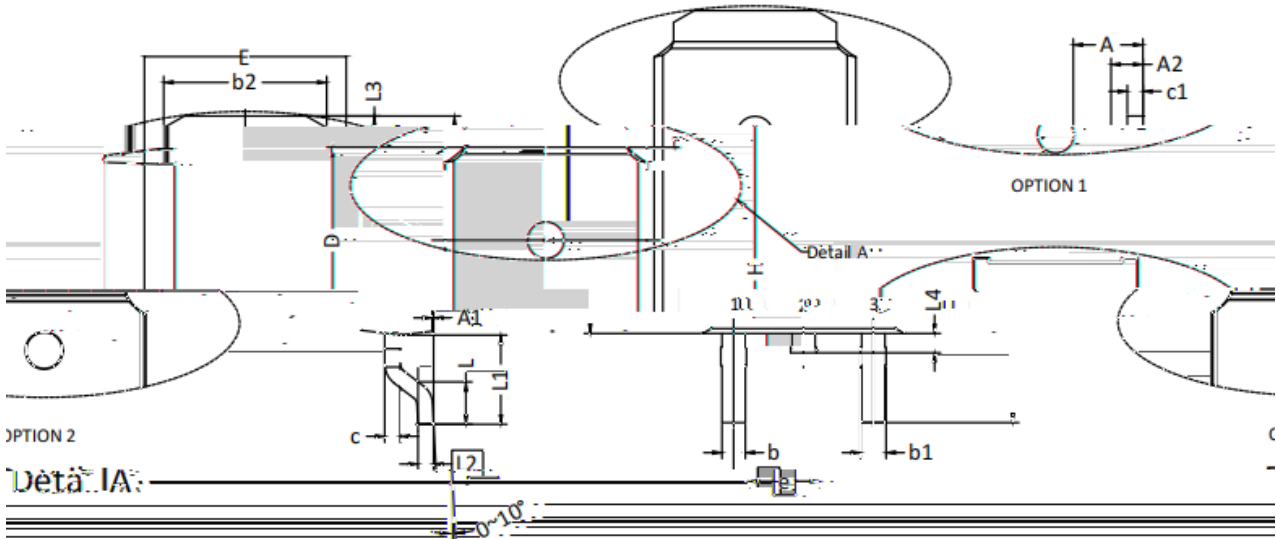
Symbol	Parameter	Value	Units
V <sub>CES</sub>	Collector-Emitter Voltage	650	V
V <sub>GES</sub>	Gate- Emitter Voltage	± 30	V
I <sub>C</sub>	Collector Current	12	A
	Collector Current @T <sub>C</sub> = 100 °C	6	
I <sub>Cpuls</sub>	Pulsed Collector Current t <sub>p</sub> limited by T <sub>Jmax</sub>	35	
-	Turn off safe operating area V <sub>CE</sub> =650V T <sub>J</sub> =175°C	35	
I <sub>F</sub>	Diode Continuous Forward Current @T <sub>C</sub> = 25 °C	12	A
	Diode Continuous Forward Current @T <sub>C</sub> = 100 °C	6	
I <sub>FM</sub>	Diode Maximum Forward Current	35	
P <sub>D</sub>	Power Dissipation @ T <sub>C</sub> = 25°C	69	W
	Power Dissipation @ T <sub>C</sub> = 100°C	28	
T <sub>J</sub> T <sub>STG</sub>	Operating Junction and Storage Temperature Range	-55 to +150	°C
T <sub>L</sub>	Maximum Temperature for Soldering	300	°C



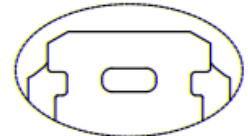
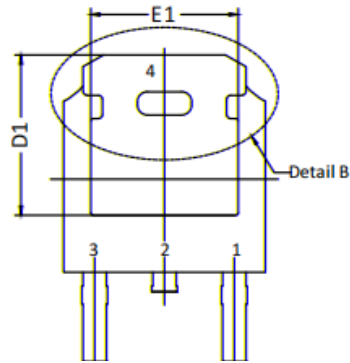
Symbol	Characterizes	Typ.	Max.	Units
K <sub>c</sub>	Thermal Resistance, Junction-to-case for IGBT		'1	°C(P
	Thermal Resistance, Junction-to-case for Diode		+'+	°C(P
K <sub>c</sub>	Thermal Resistance, Junction-to-ambient		-)	°C(P

9 M 6+. °C nge ll hra k b l i bb

Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
V <sub>(BR)CES</sub>	Collector-Emitter Breakdown Voltage	650			V	V <sub>GE</sub> =0V, I <sub>CE</sub> =1mA
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage		1.69	2.0	V	I <sub>C</sub> =6A, V <sub>GE</sub> =15V @ T <sub>J</sub> =25°C
V <sub>GE(th)</sub>	Gate Threshold Voltage	4.5		6.5	V	I <sub>C</sub> =1mA, V <sub>CE</sub> =5V
I <sub>CEs</sub>	Collector-Emitter Leakage Current			10	A	V <sub>GE</sub> =0V, V <sub>CE</sub> =650V
I <sub>GES</sub>	Gate to Emitter Reverse Leakage			100	nA	V <sub>GE</sub> =30V, V <sub>CE</sub> =0V
				-100		V <sub>GE</sub> =30V, V <sub>CE</sub> =0V
C <sub>ies</sub>	Input capacitance					



OPTION 2



OPTION 1

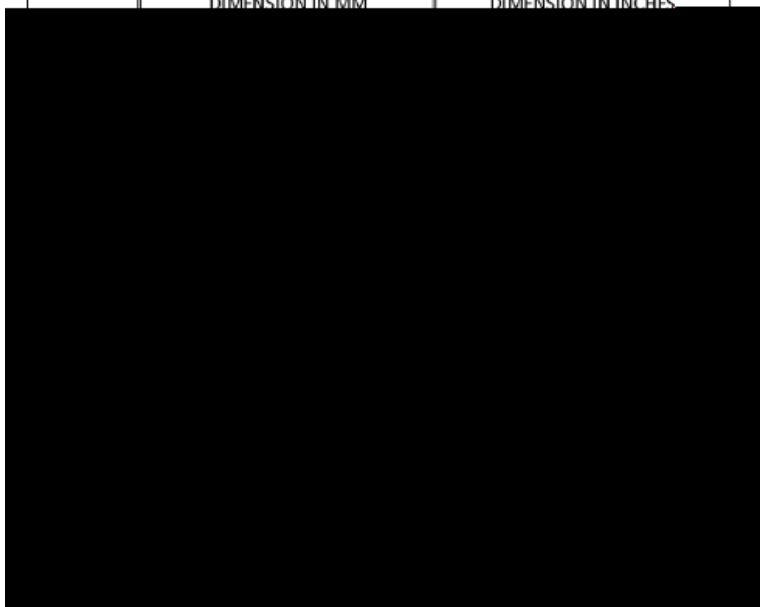
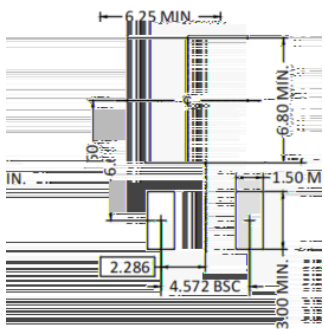
Detail B

C

DIMENSION IN MM

DIMENSION IN INCHES

RECOMMENDED LAND PATTERN





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