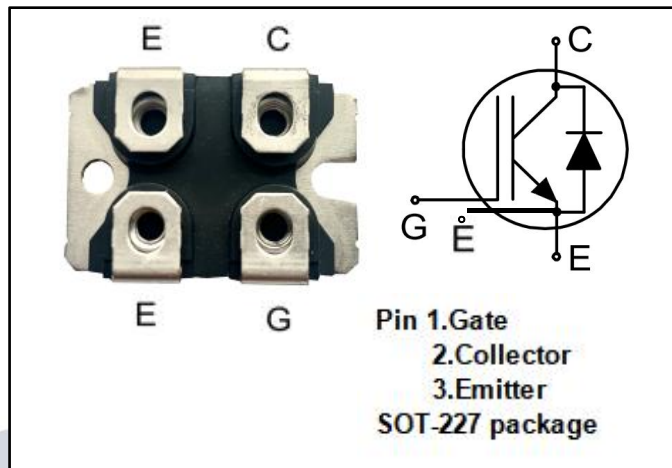


DESCRIPTION

- Short Circuit Capability
- High Current Handling Capability

APPLICATIONS

- Power Inverters
- UPS
- Motor Drives
- Welding Machines
- SMPS
- High Frequency Power Inverters



ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	650	V
V_{GES}	Gate-Emitter Voltage	± 20	V
I_C	Collector Current @ $T_C=25^\circ\text{C}$	200	A
	Collector Current @ $T_C=110^\circ\text{C}$	110	A
I_{CM}	Pulsed Collector Current @ $T_C=25^\circ\text{C}, 1\text{ms}$	670	A
I_F	Diode Forward Current @ $T_C=110^\circ\text{C}$	70	A
P_D	Power Dissipation @ $T_C=25^\circ\text{C}$	750	W
T_j	Operating Junction Temperature	-55~175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^\circ\text{C}$



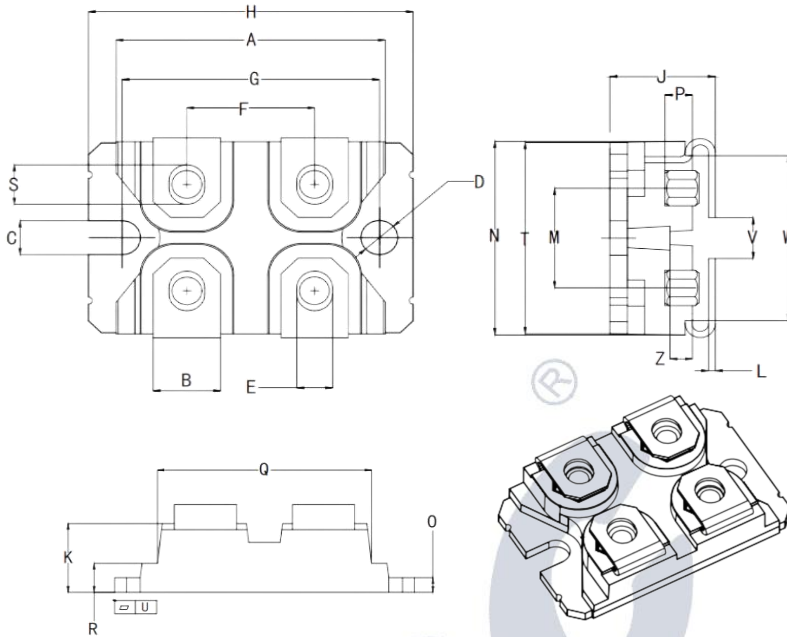
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case IGBT	0.2	°C/W
R _{th j-c}	Thermal Resistance, Junction to Case diode	0.42	°C/W

STATIC CHARACTERISTICS (T_J = 25 °C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{CES}	Collector-Emitter Breakdown Voltage	V _{GE} =0, I _C = 0.25mA	650	--	--	V
V _{GE(th)}	Gate-Emitter Threshold Voltage	V _{GE} = V _{CE} , I _C =4mA	4.0	--	6.5	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 110A, V _{CE} = 15V, T _C =25°C	--	--	2.35	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 110A, V _{CE} = 15V, T _C =150°C	--	2.50	--	V
I _{CES}	Zero Gate Voltage Collector Current	V _{CE} = 650V, V _{GE} =0	--	--	50	uA
I _{GES}	Gate-Emitter Leakage Current	V _{GE} = ±20V, V _{CE} =0	--	--	±100	nA
V _F	Diode Forward Voltage	I _F = 100A, T _J =25°C	--	--	2.3	V
		I _F = 100A, T _J =150°C	--	1.8	--	V

PACKAGE OUTLINE
Dimensions in mm



DIM	Millimeter	
	min	max
A	31.40	31.60
B	7.70	8.10
C	4.20	4.40
D	4.20	4.40
E	4.10	4.40
F	14.90	15.10
G	30.10	30.30
H	38.00	38.40
J	12.00	12.60
K	9.35	9.65
L	0.74	0.84
M	12.30	12.70
N	24.40	25.00
O	1.90	2.10
P	2.92	3.32
Q	26.60	27.00
R	3.80	4.20
S	4.95	5.45
T	23.70	24.30
U	0	0.10
V	3.50	5.50
W	20.15	20.45
Z	2.50	2.70

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