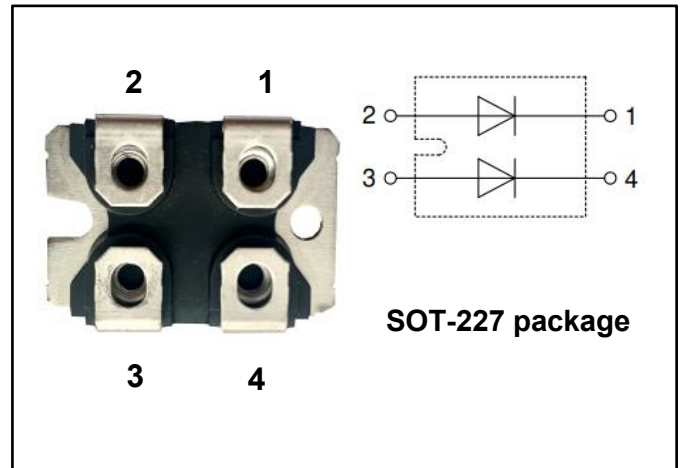


DESCRIPTION

- Very low V_f
- Extremely low switching losses
- Low I_{rm} values
- Improved thermal behaviour
- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching



APPLICATIONS

- Switch Mode Power Supply (SMPS)
- Free wheeling diode in low voltage converters

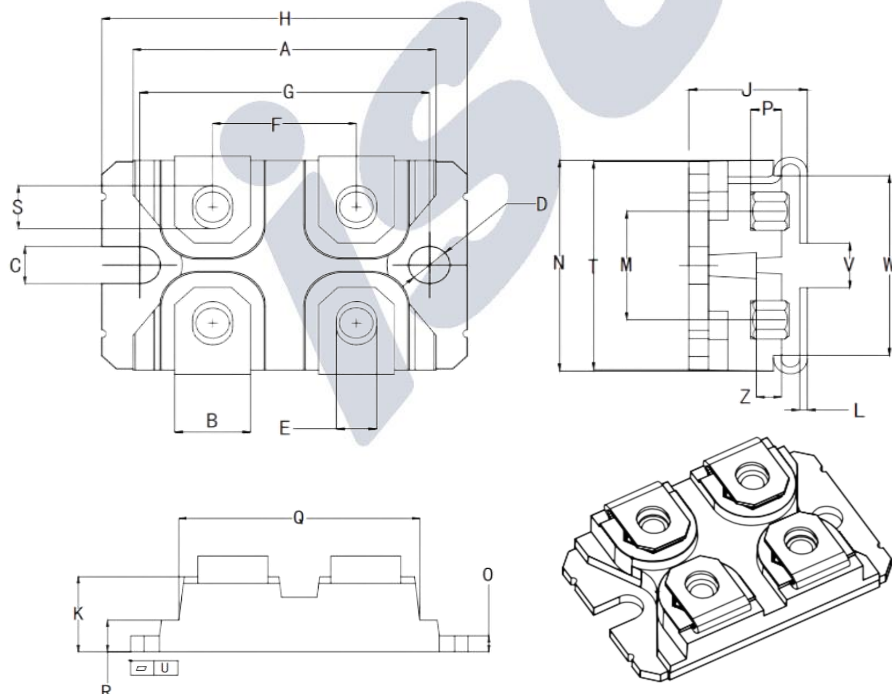
ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Max. repetitive reverse blocking voltage, $T_J=25^\circ\text{C}$	200	V
V_{RMS}	Maximum RMS Voltage	200	V
I_{FAV}	Forward voltage drop rectangular 0.5 $T_J=25^\circ\text{C}$	120	A
I_{FSM}	Peak forward surge current $t = 10 \text{ ms}$; (50 Hz), sine; $T = 45^\circ\text{C}$	1.6	kA
P_D	Total power dissipation	310	W
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.4	$^\circ\text{C/W}$
T_J	Junction Temperature	-40~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$
V_{ISO}	Isolation voltage A.C. 1 minute	2500	V

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_F	Forward Voltage drop	$I_F=120A; T_J=25^{\circ}C$	--	--	1.0	V
		$I_F=240A; T_J=25^{\circ}C$	--	--	1.26	
V_F	Forward Voltage drop	$I_F=120A; T_J=125^{\circ}C$			0.87	
		$I_F=240A; T_J=125^{\circ}C$			1.17	
I_R	Reverse current	$V_R=200V; T_J=25^{\circ}C$	--	--	1.5	mA
		$V_R=200V; T_J=125^{\circ}C$	--	--	15	

PACKAGE OUTLINE (UNIT: 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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