

FEATURES

- Isolated mounting base 2500V-
- Pressure contact technology with Increased power cycling capability
- Space and weight savings
- Welding

TYPICAL APPLICATIONS

- Inverter
- Inductive heating
- Chopper

TECHNICAL DATA

DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
MDS200/04	400	500
MDS200/16	1600	1700

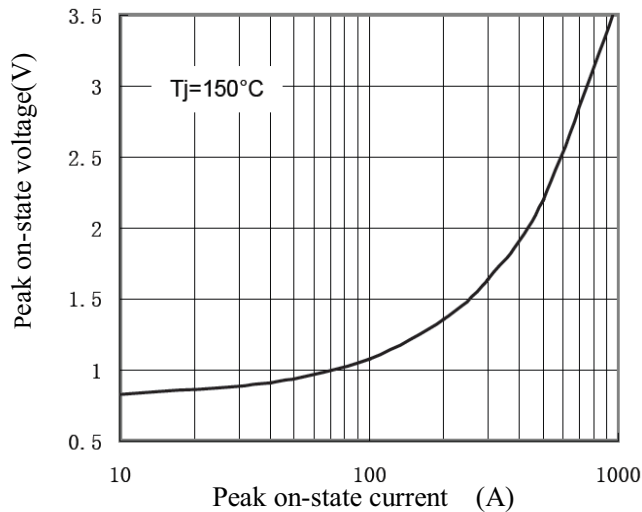


Symbol	Parameter	Test condition	Rating	Unit
I_o	Output DC current	Three-phase whole wave rectifying circuit $T_C: 100^\circ\text{C}$	200	A
I_{FSM}	Forward surge current	$t=10\text{ms}, 50\text{Hz}, \sin, T_{jm}$	2100	A
I^2t	I^2t value	$V_R = 0.6V_{RRM}, T_{jm}$	22100	A^2S
V_{ISO}	Isolation voltage	AC one min	2500	V
T_j	Operating junction temperature		-40 to +150	$^\circ\text{C}$
T_{jm}	Rated junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-40 to +125	$^\circ\text{C}$
Md	Mounting torque (copper plate) M6		4	N·m
	Mounting torque (terminal) M6		6	N·m
W_t	weight		300	g

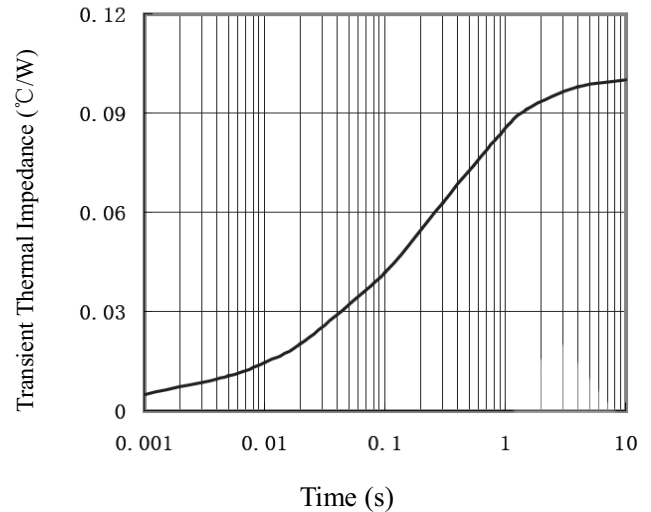
■ Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I_{RRM}	Peak reverse repetitive current	Single-side heat dissipation, $V_R=V_{RRM}$, sine half wave, $T_j=150^\circ\text{C}$	15	mA
V_{FM}	Peak forward voltage	$I_{FM}=100\text{A}, T_j=25^\circ\text{C}$	1.35	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.1	$^\circ\text{C/W}$

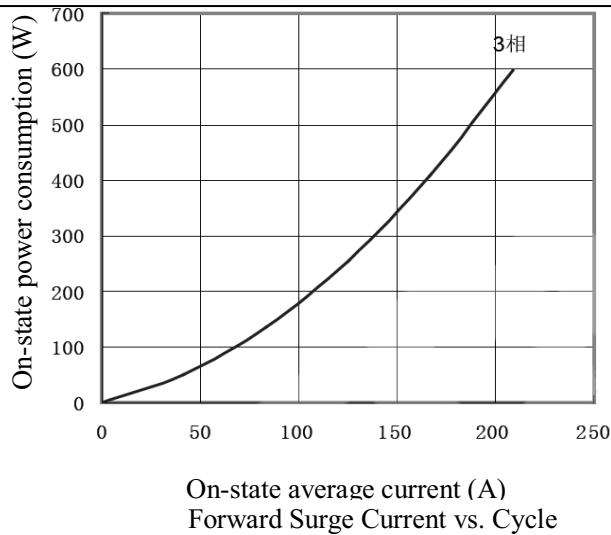
Forward current vs. Forward voltage



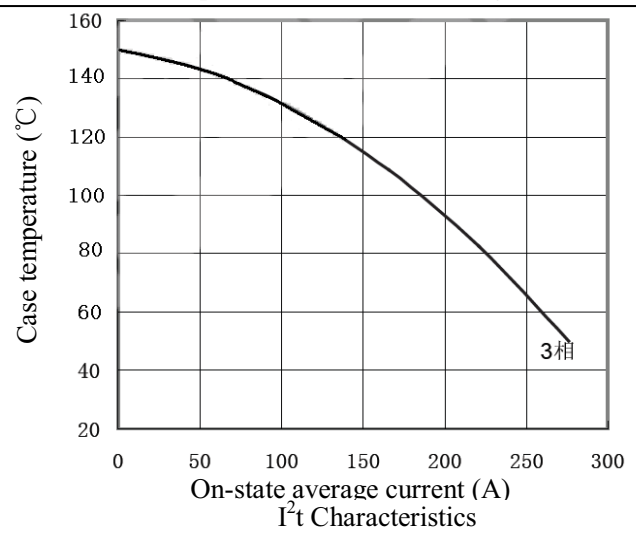
Thermal Impedance (junction to case)



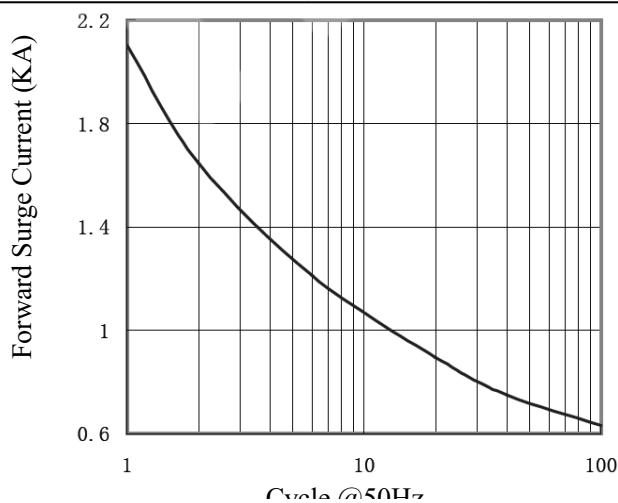
Power Consumption vs. Average Current



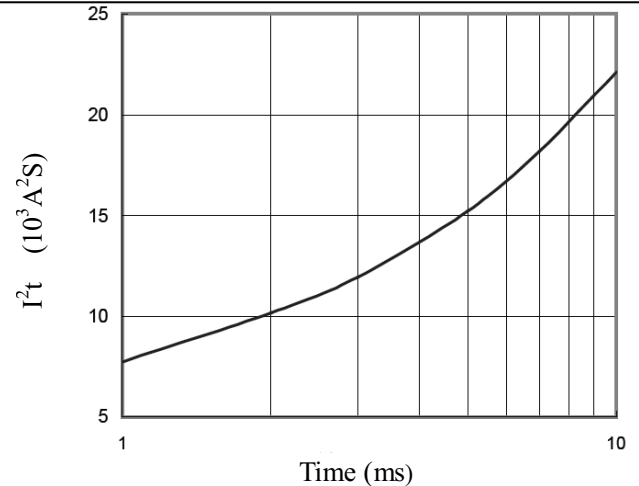
Case temperature vs. On-state Average Current



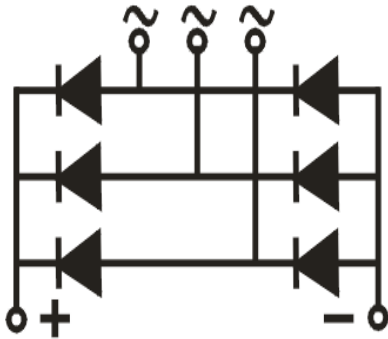
Forward Surge Current vs. Cycle



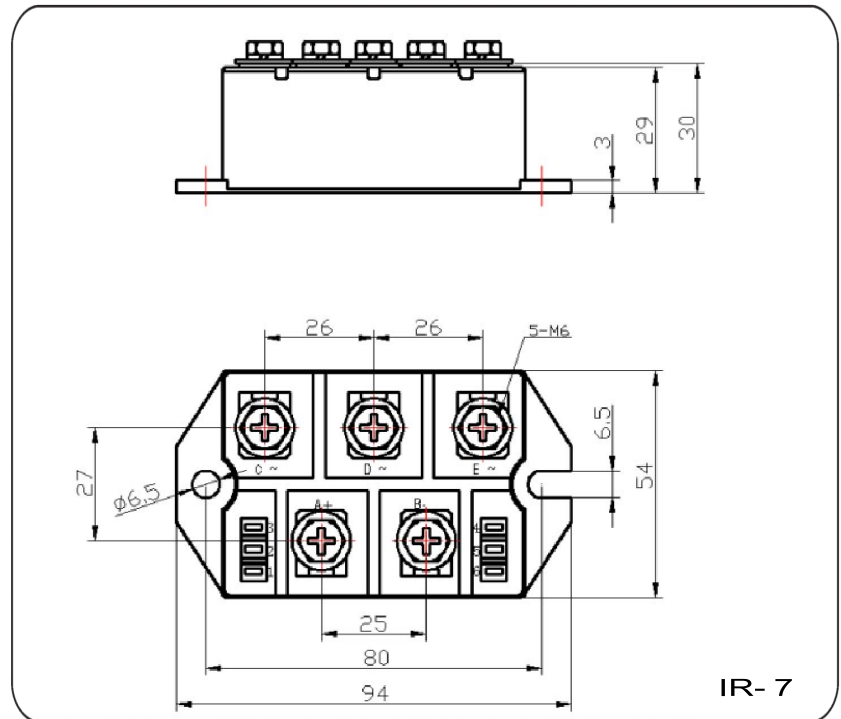
I^2t Characteristics



CIRCUIT DIAGRAM



PACKAGE OUTLINE



All dimensions are in mm.

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