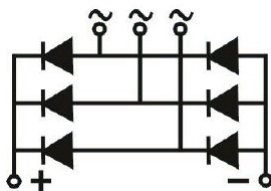


### Feature

- International standard package
- Low forward voltage drop
- Isolation voltage 2500V~



### Application

- DC power suppliers for apparatus device
- Input rectifying power supply for PWM converters
- Inverter welders

### Maximum value

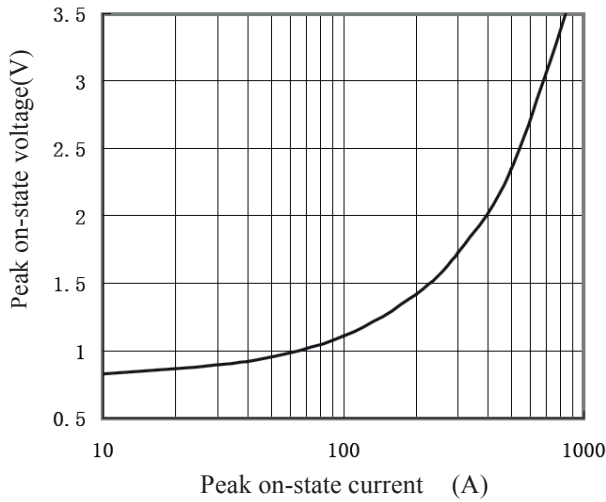
Symbol	Parameter	Rating							Unit
		MDS160-06F	MDS160-08F	MDS160-10F	MDS160-12F	MDS160-14F	MDS160-16F	MDS160-18F	
$V_{RRM}$	Peak reverse repetitive voltage	600	800	1000	1200	1400	1600	1800	V
$V_{RSM}$	Peak reverse non-repetitive voltage	700	900	1100	1300	1500	1700	1900	V

Symbol	Parameter	Test condition	Rating	Unit
$I_o$	Output DC current	Three-phase whole wave rectifying circuit $T_c:100^\circ\text{C}$	160	A
$I_{FSM}$	Forward surge current	$t=10\text{ms}, 50\text{HZ}, \text{sin}, T_{jm}$	1800	A
$I^2t$	$I^2t$ value	$V_R = 0.6V_{RRM}, T_{jm}$	16200	$\text{A}^2\text{S}$
$V_{ISO}$	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		250	g

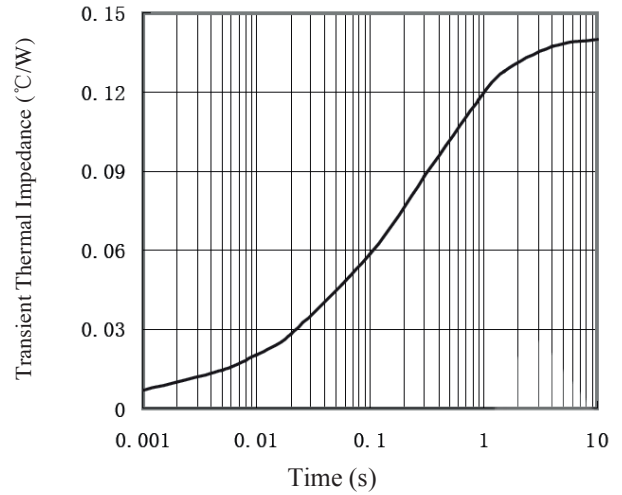
### Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
$I_{RRM}$	Peak reverse repetitive current	Single-side heat dissipation, $V_R=V_{RRM}$ , sine half wave, $T_j=150^\circ\text{C}$	12	mA
$V_{FM}$	Peak forward voltage	$I_{FM}=200\text{A}, T_j=25^\circ\text{C}$	1.3	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.14	$^\circ\text{C}/\text{W}$

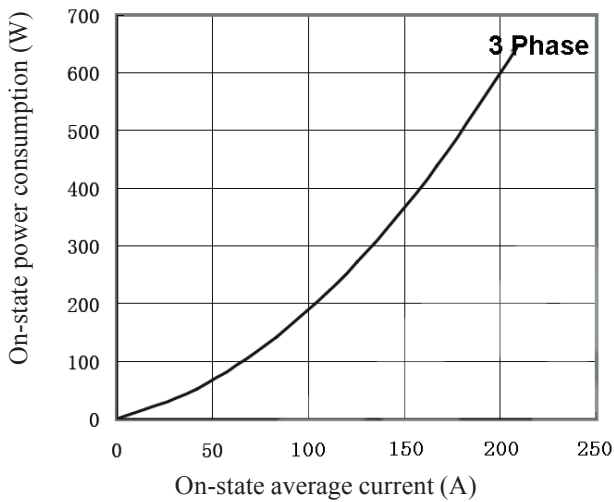
Forward current vs. Forward voltage



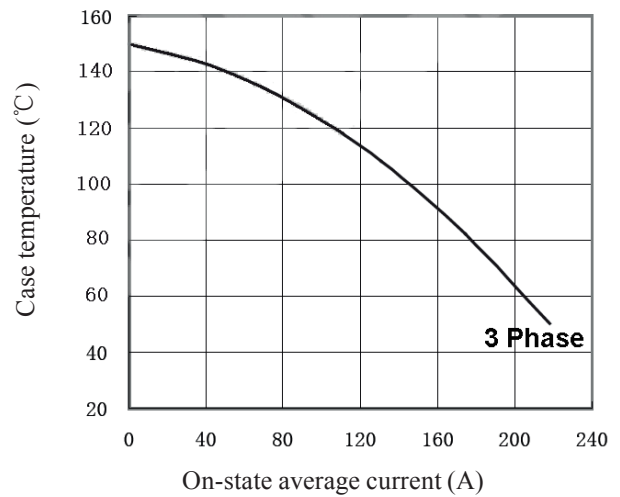
Thermal Impedance (junction to case)



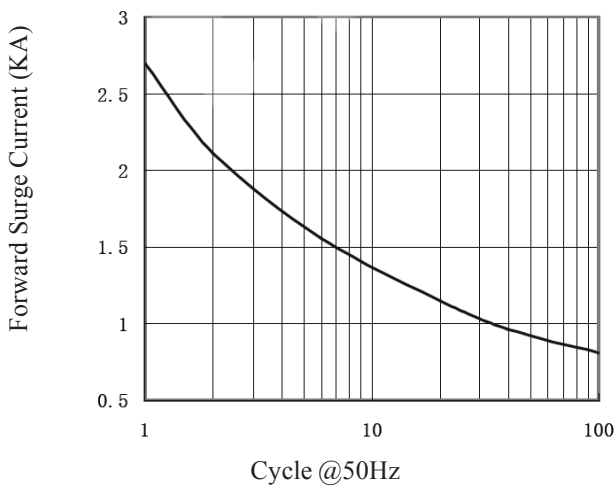
Power Consumption vs. Average Current



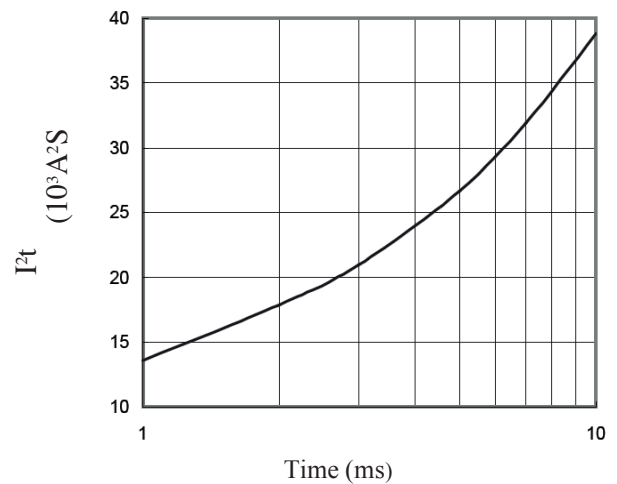
Case Temperature vs. O-state Average Current



Forward Surge Current vs. Cycle



I<sup>2</sup>t Characteristics



Dimension

