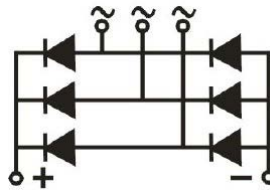


### Feature

- 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

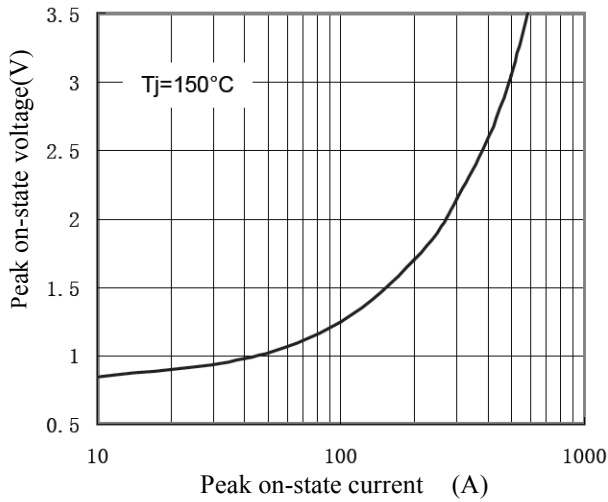
Symbol	Parameter	Rating		Unit
		MDS100-12	MDS100-16	
$V_{RRM}$	Peak reverse repetitive voltage	1200	1600	V
$V_{RSM}$	Peak reverse non-repetitive voltage	1300	1700	V

Symbol	Parameter	Test condition	Rating	Unit
$I_o$	Output DC current	Three-phase whole wave rectifying circuit $T_c:100^{\circ}\text{C}$	100	A
$I_{FSM}$	Forward surge current	$t=10\text{ms}, 50\text{HZ}, \sin, T_{jm}$	1200	A
$I^2t$	$I^2t$ value	$V_R = 0.6V_{RRM}, T_{jm}$	7200	$\text{A}^2\text{S}$
$V_{ISO}$	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		4	N·m
$W_t$	weight		195	g

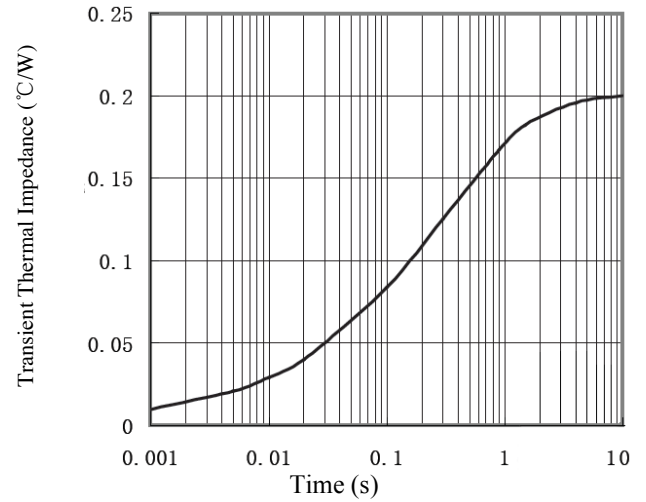
### Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
$I_{RRM}$	Peak reverse repetitive current	Single-side heat dissipation, $V_R=V_{RRM}$ , sine half wave, $T_j=150^{\circ}\text{C}$	8	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	0.2	$^{\circ}\text{C}/\text{W}$

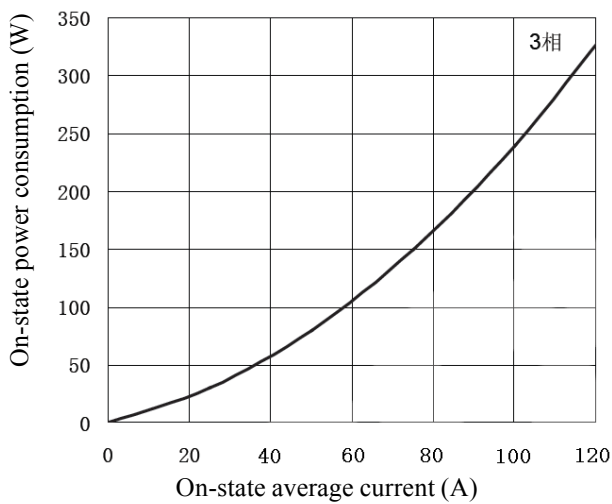
Forward current vs. Forward voltage



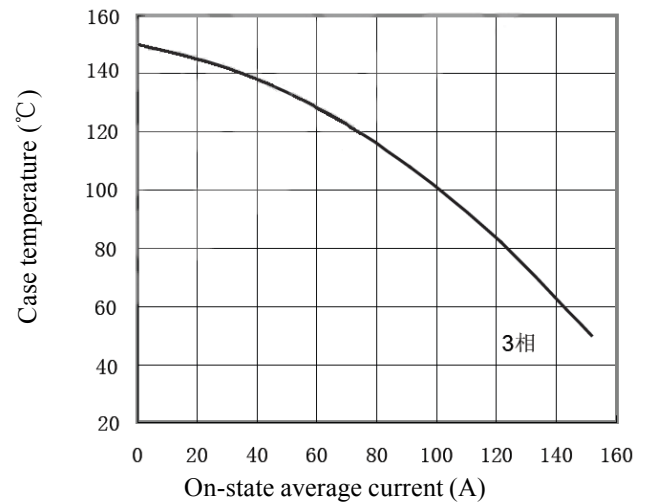
Thermal Impedance (junction to case)



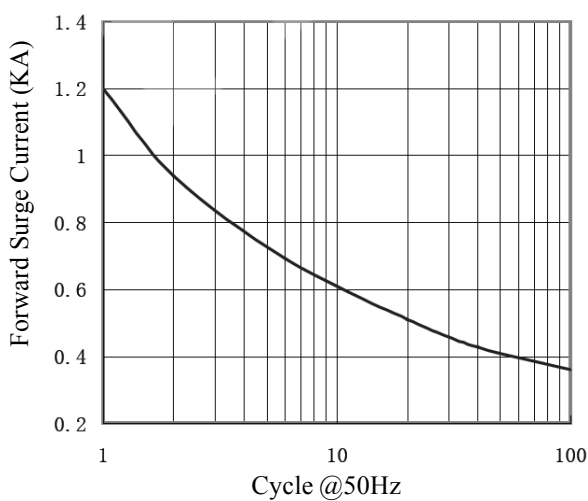
Power Consumption vs. Average Current



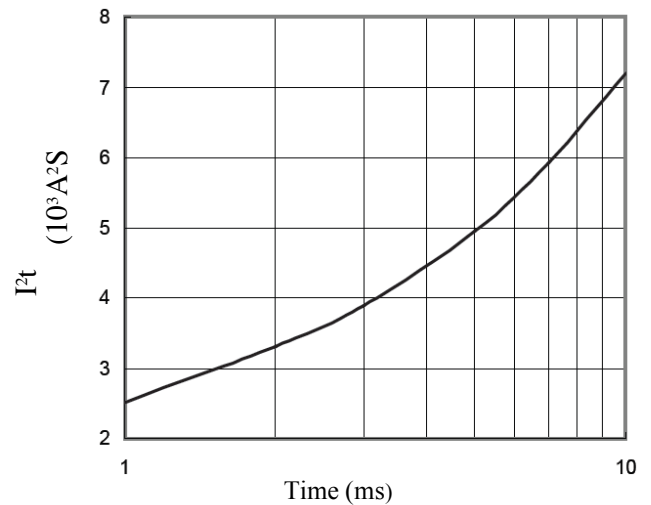
Case Temperature vs. O-state Average Current



Forward Surge Current vs. Cycle



$I^2t$  Characteristics



Dimension

