



# MDC1000 MDA1000 MDK1000 MD1000 Diode Modules

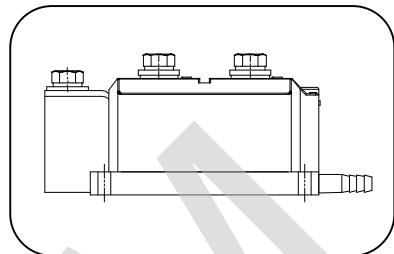
## Features:

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

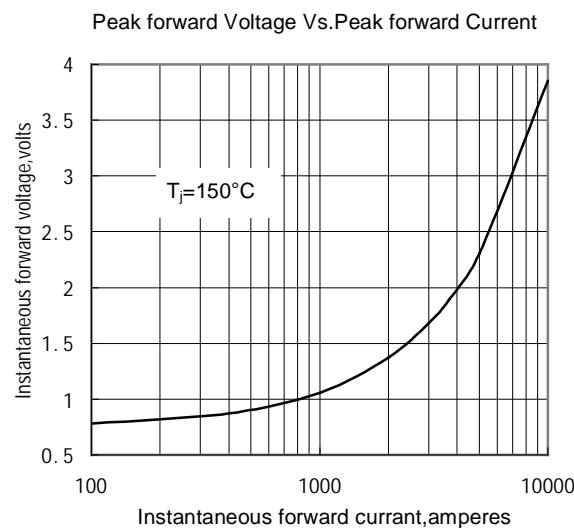
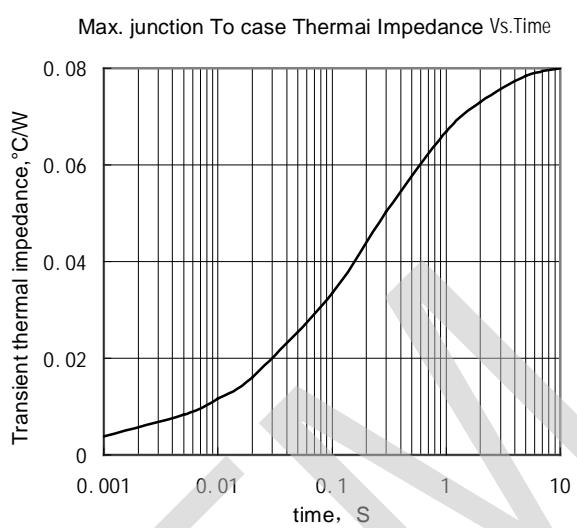
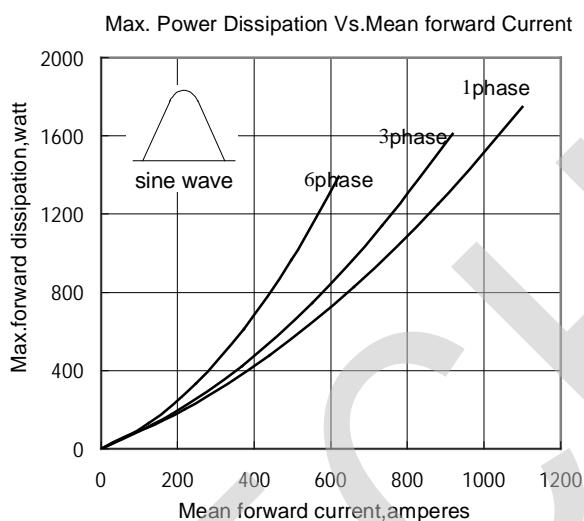
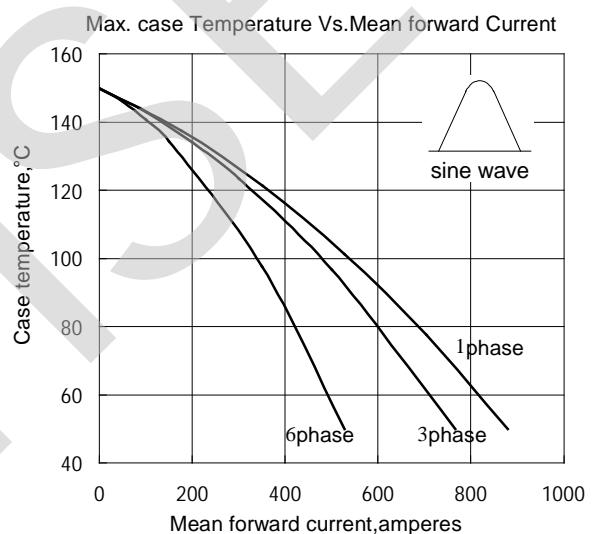
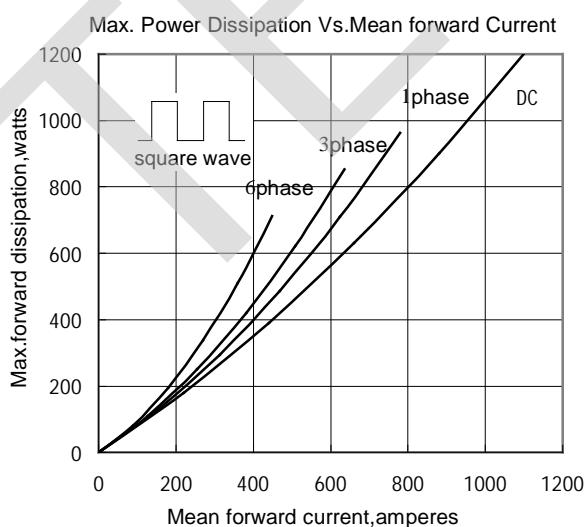
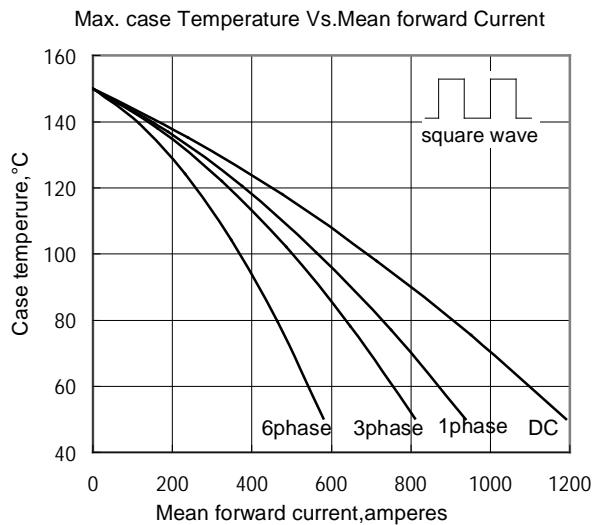
## Typical Applications

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{F(AV)}$	<b>1000A</b>
$V_{RRM}$	<b>600~1800V</b>
$I_{FSM}$	<b><math>18A \times 10^3</math></b>
$I^2t$	<b><math>1650A^2 S \times 10^3</math></b>



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=60^{\circ}C$	150			1000	A
$I_{F(RMS)}$	RMS forward current		150			1570	A
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM}$ tp=10ms $V_{RSM}=V_{RRM}+200V$	150	600		1800	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			18	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$				1650	$A^2s \times 10^3$
$V_{FO}$	Threshold voltage		150			0.75	V
$r_F$	Forward slop resistance					0.31	$m\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=3000A$	25			1.82	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.080	$^{\circ}C /W$
$R_{th(c-h)}$	Thermal resistance case to heat sink	At 180° sine Single side cooled					$^{\circ}C /W$
$V_{iso}$	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1mA(max)$		2500			V
$F_m$	Terminal connection torque (M12)				14		$N\cdot m$
	Mounting torque (M8)				12		$N\cdot m$
$T_{stg}$	Stored temperature			-40		125	$^{\circ}C$
$W_t$	Weight				3600		g
Outline				411F3			


**Fig.1**

**Fig.2**

**Fig.3**

**Fig.4**

**Fig.5**

**Fig.6**

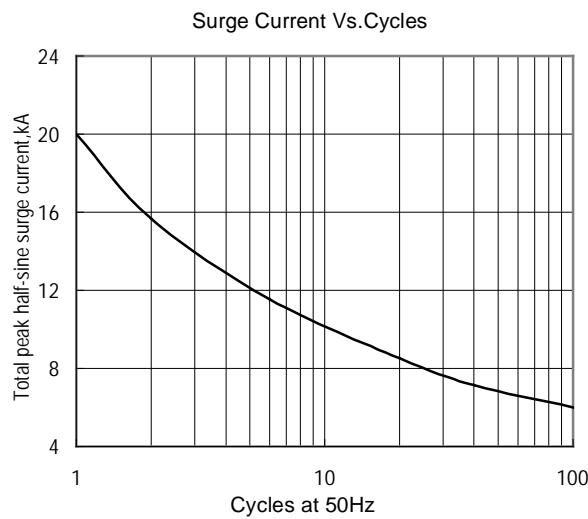


Fig.7

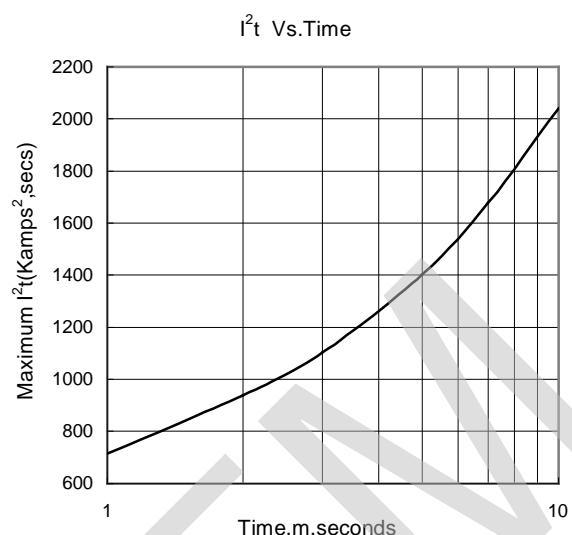


Fig.8

### Outline:

