

**Features:**

- Isolated mounting base 3000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

**Typical Applications**

- Various rectifiers
- DC supply for PWM inverter

$V_{RRM}$	Type & Outline		
	2000V	2200V	2500V
MDx40-20-215F3			
MDx40-22-215F3			
MDx40-25-215F3			
MD40-25-215F3G			

MDx stands for any type of **MDC**, **MDA**, **MDK**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j$ (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^\circ\text{C}$	150			40	A
$I_{F(RMS)}$	RMS forward current					63	A
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			8	mA
$I_{FSM}$	Surge forward current	$V_R=60\%V_{RRM}, t=10\text{ms}$ half sine,	150			1.0	kA
$I^2t$	$I^2t$ for fusing coordination					5.0	$10^3\text{A}^2\text{s}$
$V_{FO}$	Threshold voltage		150			0.85	V
$r_F$	Forward slope resistance					4.50	$\text{m}\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=120\text{A}$	25			1.50	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.9	$^\circ\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.2	$^\circ\text{C}/\text{W}$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$ , $I_{iso}:1\text{mA}(\text{MAX})$		3000			V
$F_m$	Terminal connection torque(M5)			2.5		4.0	$\text{N}\cdot\text{m}$
	Mounting torque(M6)			4.5		6.0	$\text{N}\cdot\text{m}$
$T_{vj}$	Junction temperature			-40		150	$^\circ\text{C}$
$T_{stg}$	Stored temperature			-40		125	$^\circ\text{C}$
$W_t$	Weight				120		g
Outline				215F3			

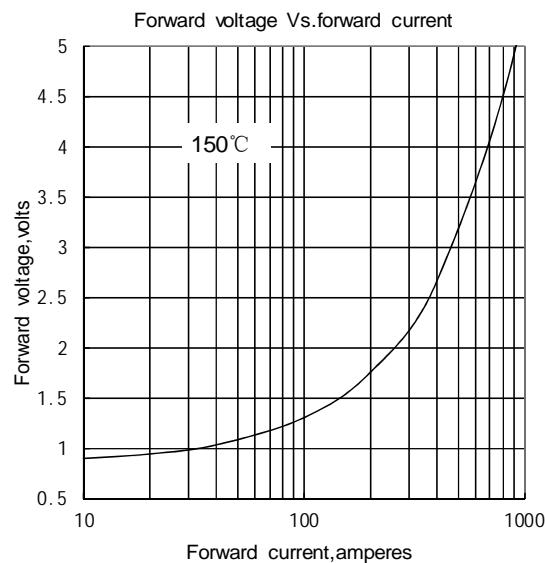


Fig.1

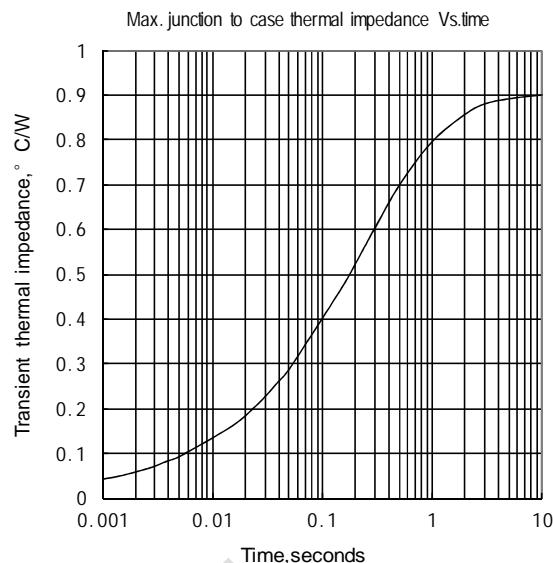


Fig.2

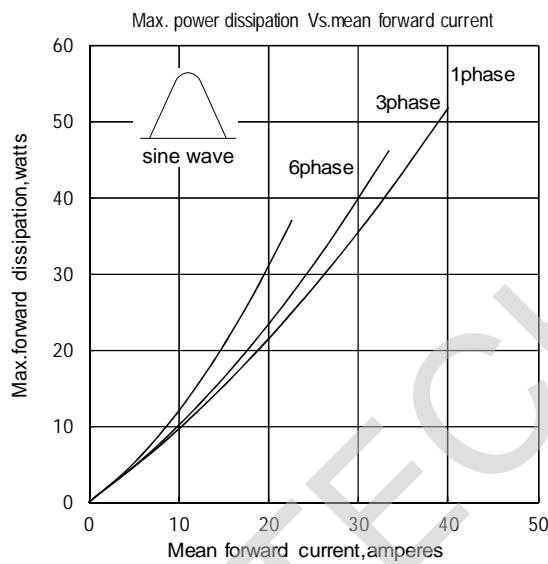


Fig.3

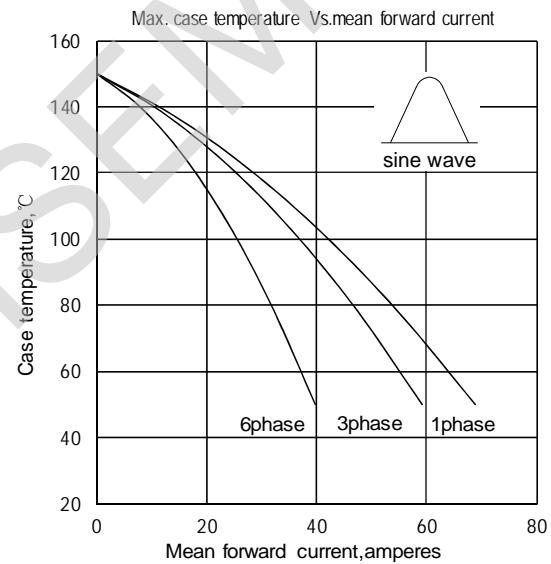


Fig.4

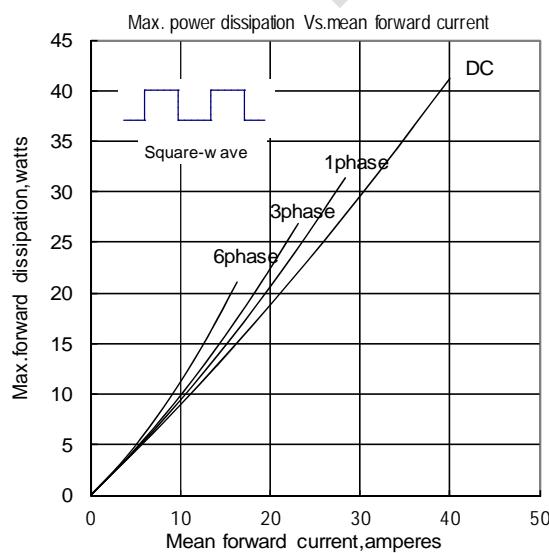


Fig.5

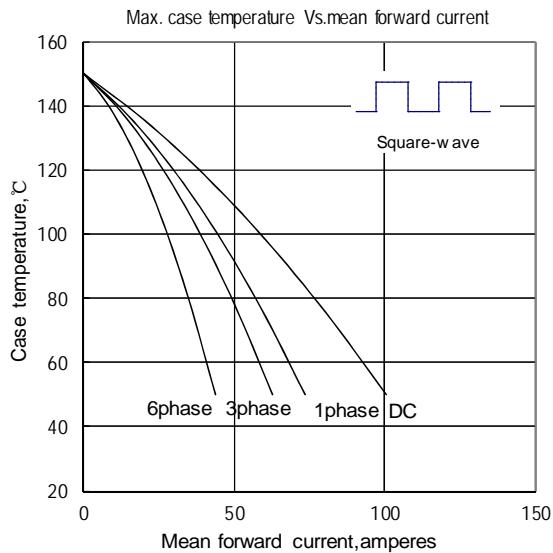


Fig.6

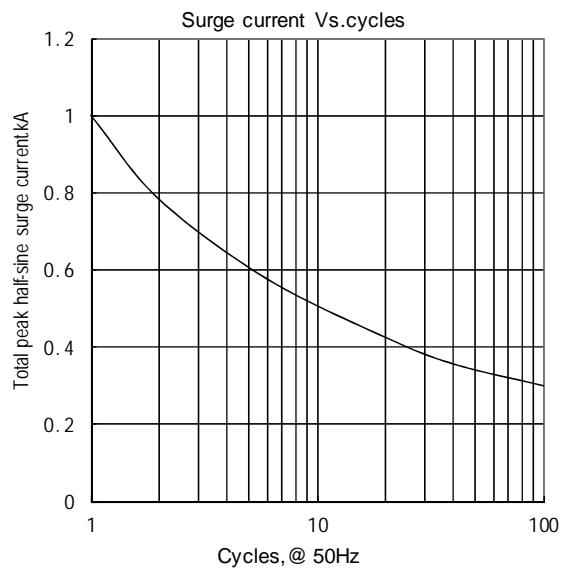


Fig.7

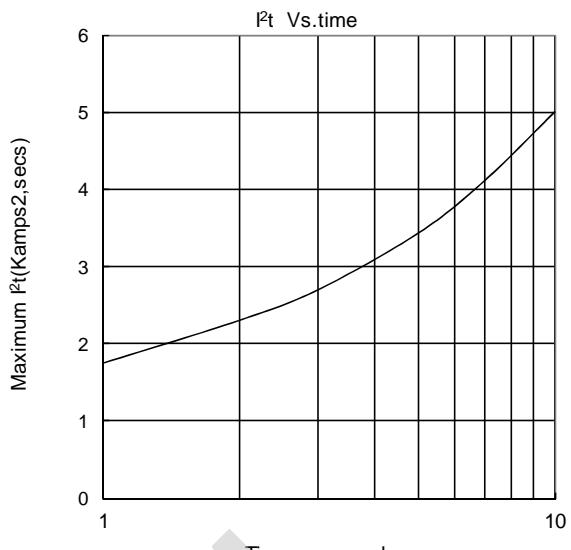
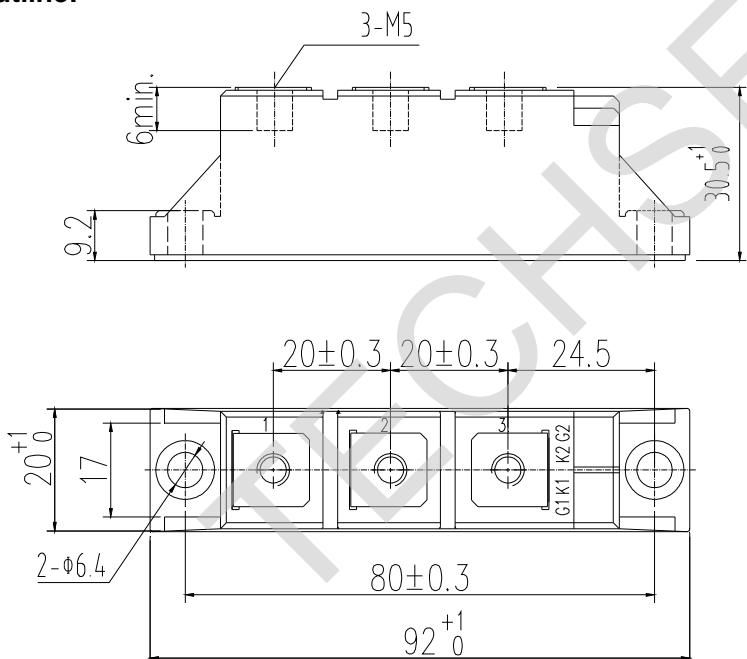


Fig.8

**Outline:**

Unmarked dimensional tolerance: ±0.5mm

