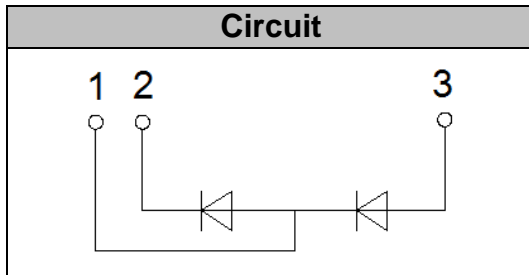


## Glass Passivated Rectifier Diode Modules

**V<sub>RRM</sub>** 2200V  
**I<sub>FAV</sub>** 700 Amp

### Features

- Insulation voltage 2500V
- Standard assembly, good ability to power cycle
- Low V<sub>F</sub>
- Small volume, low weight, easy installation



### Applications

- Non-controllable rectifiers for AC/AC converters
- Rectification power supply
- electromotor soft starter
- Inverter

### Module Type

TYPE	V <sub>RRM</sub>	V <sub>RSM</sub>
MD700C22D7	2200V	2400V

### Maximum Ratings

Symbol	Conditions	Values	Units
I <sub>F(AV)</sub>	Single phase ,half wave 180° conduction T <sub>c</sub> =100°C	700	A
I <sub>F(RMS)</sub>		1100	A
I <sub>FSM</sub>	t=10mS T <sub>vj</sub> =45°C	21000	A
i <sup>2</sup> t	t=10mS T <sub>vj</sub> =45°C	2205000	A <sup>2</sup> s
V <sub>isol</sub>	a.c.50HZ;r.m.s.;1min	2500	V
T <sub>vj</sub>		-40 to 150	°C
T <sub>stg</sub>		-40 to 150	°C
M <sub>t</sub>	To terminals(M10)	12	Nm
M <sub>s</sub>	To heatsink(M6)	6	Nm
Weight	Module (Approximately)	1460	g

### Thermal Characteristics

Symbol	Conditions	Values	Units
R <sub>th(j-c)</sub>	Per diode	0.065	°C/W

### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V <sub>FM</sub>	T=25°C I <sub>F</sub> =2400A	—		1.50	V
I <sub>RD</sub>	T <sub>vj</sub> =150°C V <sub>RD</sub> =V <sub>RRM</sub>	—	—	50	mA
r <sub>f</sub>	T <sub>J</sub> =25°C			0.185	mΩ
V <sub>f0</sub>				0.78	V

## Performance Curves

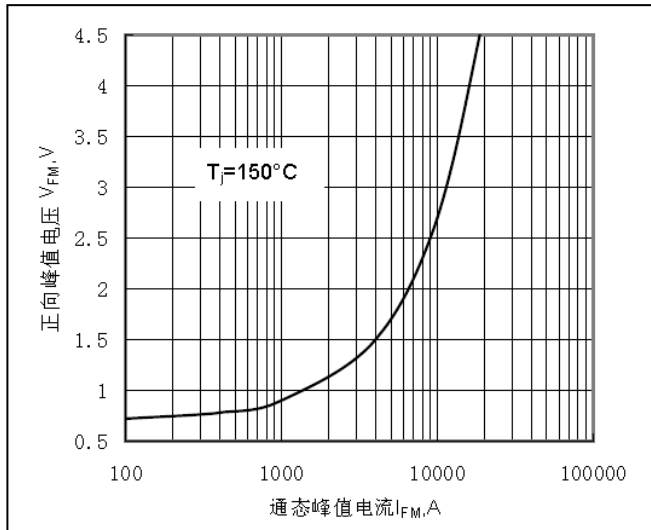


Fig1. Forward Characteristics

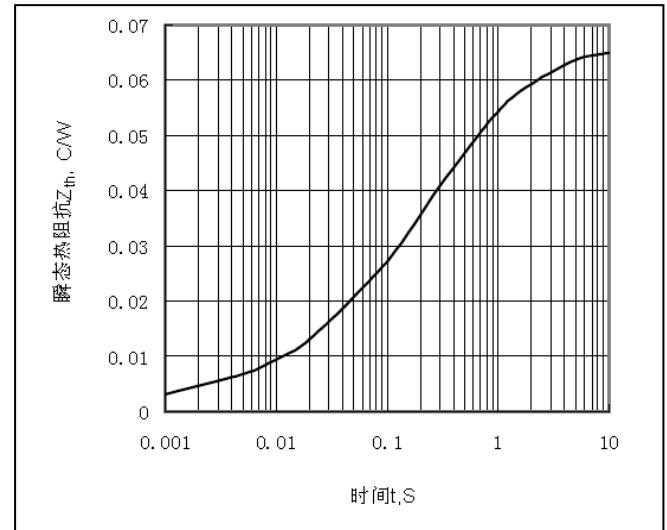


Fig2. Max. Thermal Impedance Vs. Time

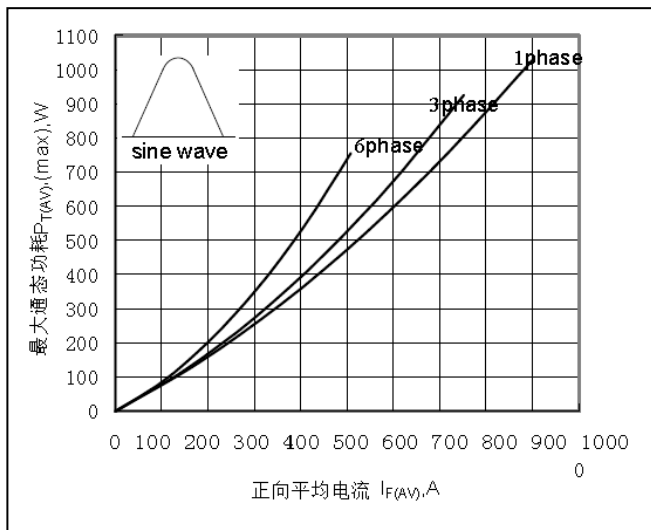


Fig3. Max. Power Dissipation Vs. Mean forward Current

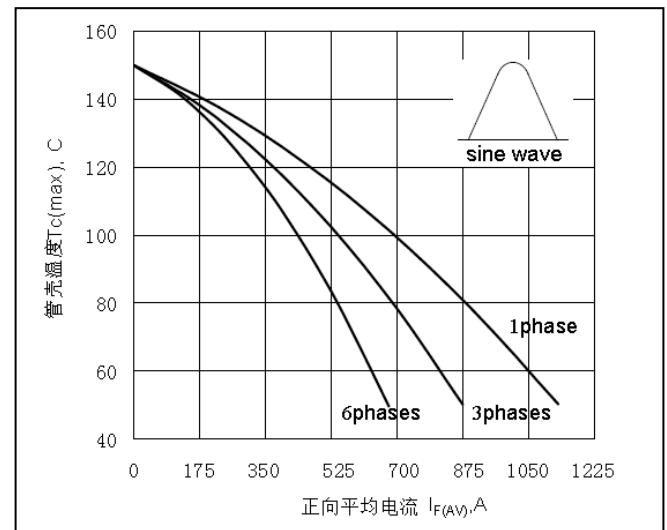


Fig4. Max. case Temperature Vs. Mean forward Current

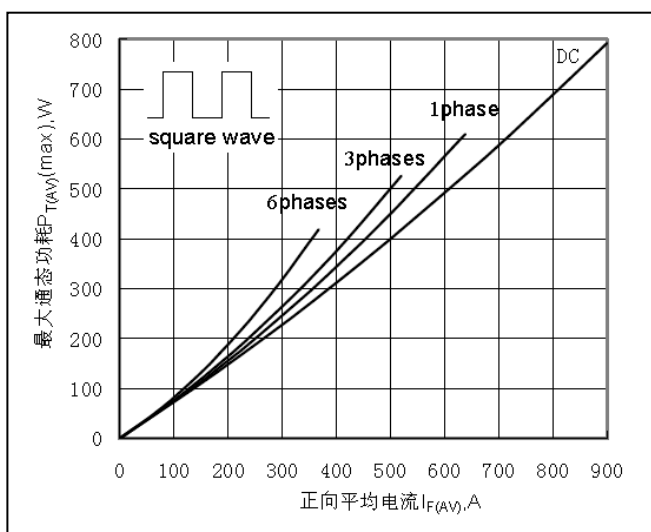


Fig5. Max. Power Dissipation Vs. Mean forward Current

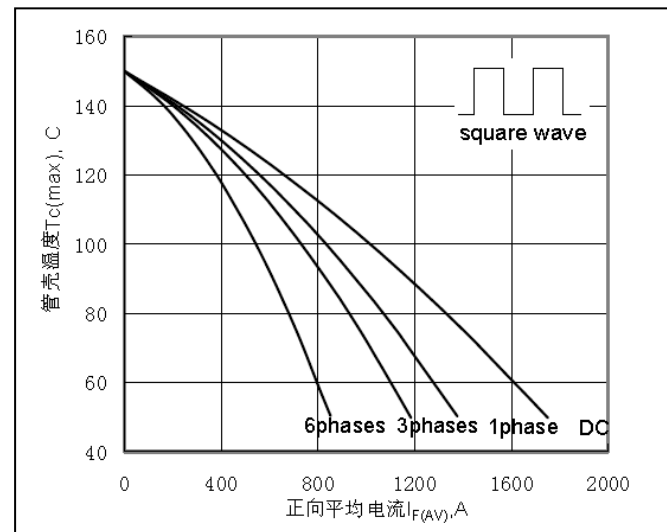


Fig6. Max. case Temperature Vs. Mean forward Current

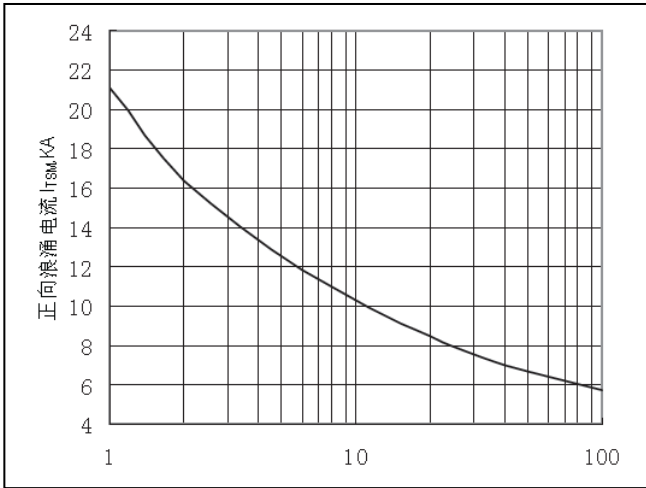


Fig7. Surge Current Vs.Cycles

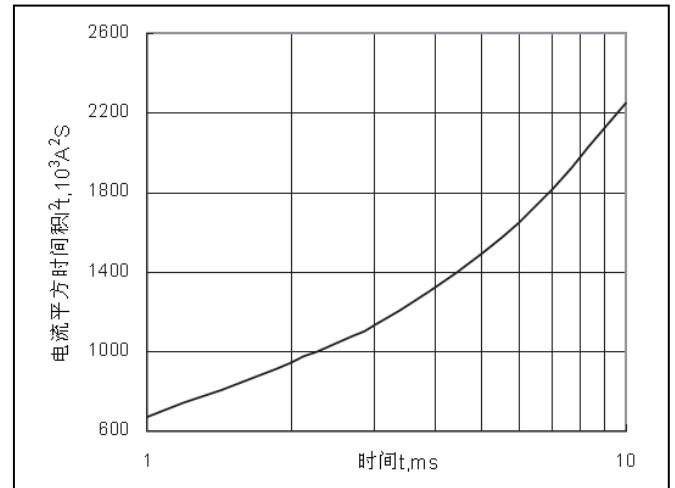


Fig8.  $I^2t$  Vs.Time

## Package Outline Information

