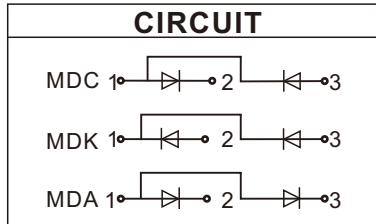




**FEATURES**

- Industrial Standard Package
- High Surge Current Capability
- Low Leakage Current
- Electrically Isolated by DBC Ceramic



**APPLICATIONS**

- Field Supply For DC Motors
- Various Rectifiers
- DC supply for PWM inverter

**Module Type**

Type			V <sub>RRM</sub>	V <sub>RSM</sub>	Unit
MDC600-08D4	MDK600-08D4	MDA600-08D4	800	900	V
MDC600-12D4	MDK600-12D4	MDA600-12D4	1200	1300	
MDC600-16D4	MDK600-16D4	MDA600-16D4	1600	1700	
MDC600-18D4	MDK600-18D4	MDA600-18D4	1800	1900	

**ABSOLUTE MAXIMUM RATINGS**

T<sub>C</sub>=25°C unless otherwise specified

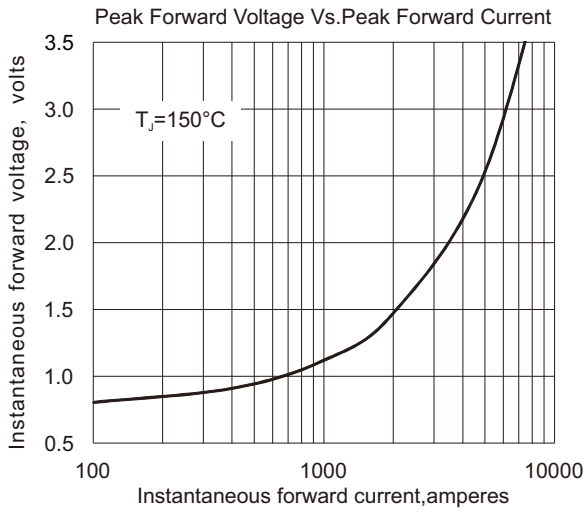
Symbol	Parameter	Test Conditions	Values	Unit
I <sub>F(AV)</sub>	Average Forward Current	Single phase, half wave, 180°C conduction, T <sub>C</sub> = 100°C	600	A
I <sub>F(RMS)</sub>	R.M.S. Forward Current		942	
I <sub>FSM</sub>	Non-Repetitive Surge Forward Current	1/2 cycle, 50HZ, peak value T <sub>J</sub> =150°C	19.0	KA
		1/2 cycle, 60HZ, peak value T <sub>J</sub> =150°C	20.3	
I <sup>2</sup> t	I <sup>2</sup> t(For Fusing)	1/2 cycle, 50HZ, peak value T <sub>J</sub> =150°C	1805	KA <sup>2</sup> S
		1/2 cycle, 60HZ, peak value T <sub>J</sub> =150°C	1702	KA <sup>2</sup> S
T <sub>J</sub>	Junction Temperature		-40 to +150	°C
T <sub>STG</sub>	Storage Temperature Range		-40 to +125	°C
V <sub>ISO</sub>	Isolation Breakdown Voltage	AC, 50Hz(R.M.S), t=1minute	2500	V
Torque	Module-to-Sink	Recommended(M6)	6.0	N.m
Torque	Module Electrodes	Recommended(M10)	12.0	N.m
R <sub>th(J-C)</sub>	Junction-to-Case Thermal Resistance		0.065	K /W
R <sub>th(C-H)</sub>	Case-to-Heatsink Thermal Resistance		0.02	K /W
Weight			1500	g

**ELECTRICAL AND THERMAL CHARACTERISTICS**

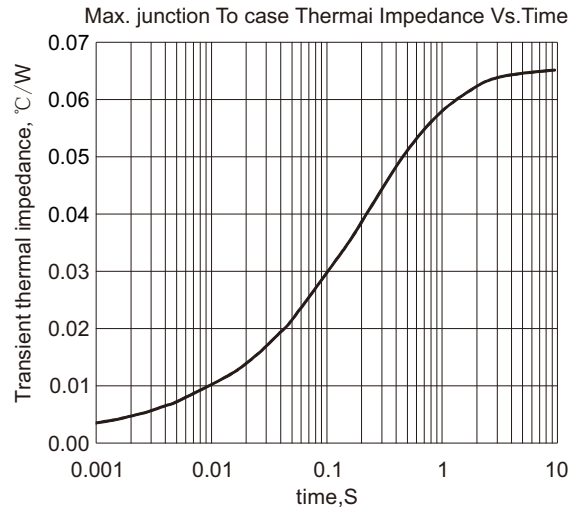
T<sub>C</sub>=25°C unless otherwise specified

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I <sub>RRM</sub>	Max.Reverse Leakage Current	V <sub>R</sub> = V <sub>RRM</sub> , T <sub>J</sub> =150°C			40	mA
V <sub>FM</sub>	Forward Voltage	I <sub>F</sub> =2000A			1.45	V
V <sub>FO</sub>	For power-loss calculations only				0.75	V
r <sub>F</sub>	T <sub>J</sub> =150°C				0.35	mΩ

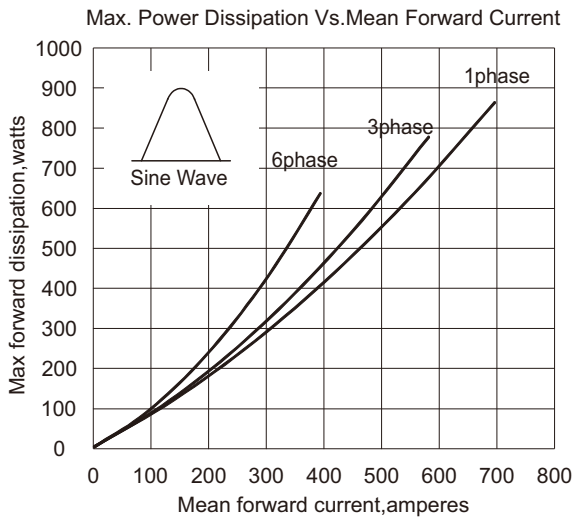
**CHARACTERISTIC CURVES**



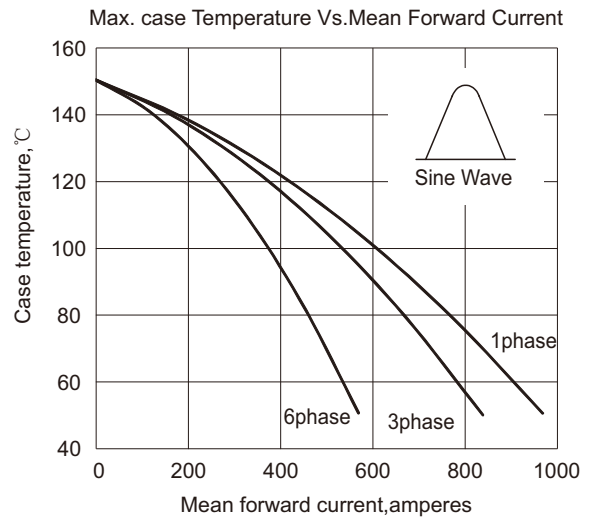
**Fig.1**



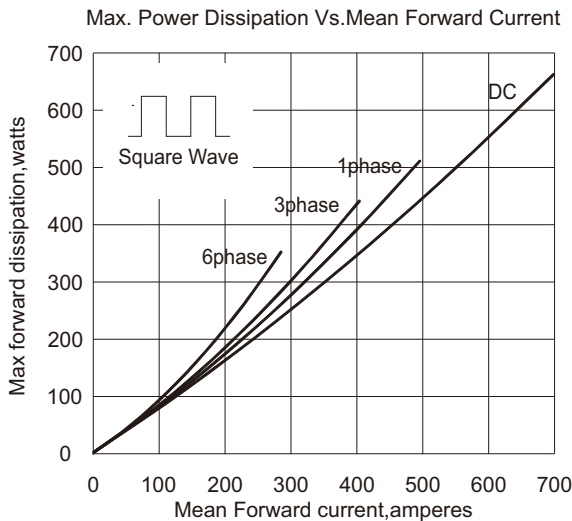
**Fig.2**



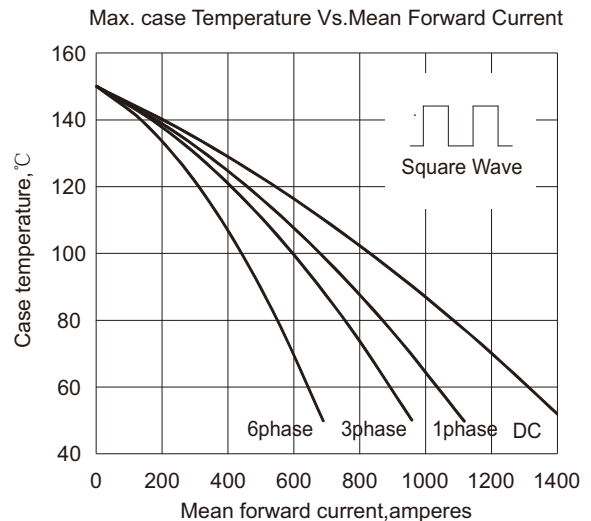
**Fig.3**



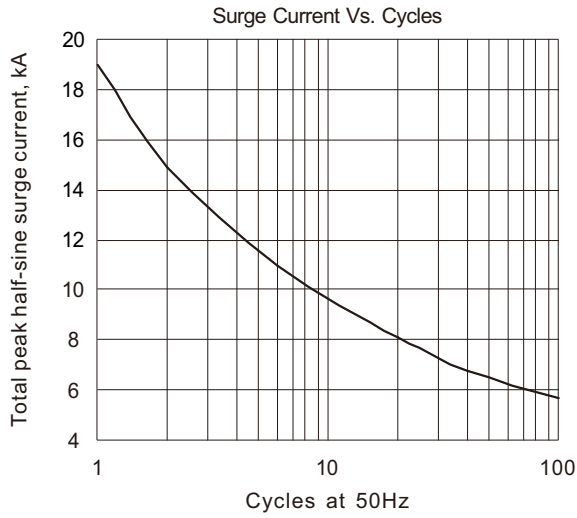
**Fig.4**



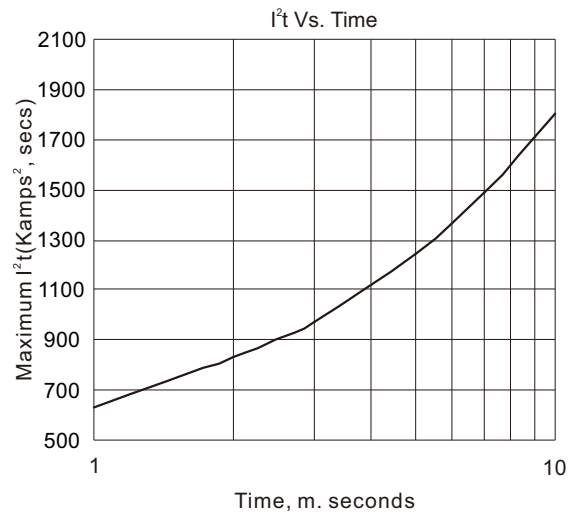
**Fig.5**



**Fig.6**

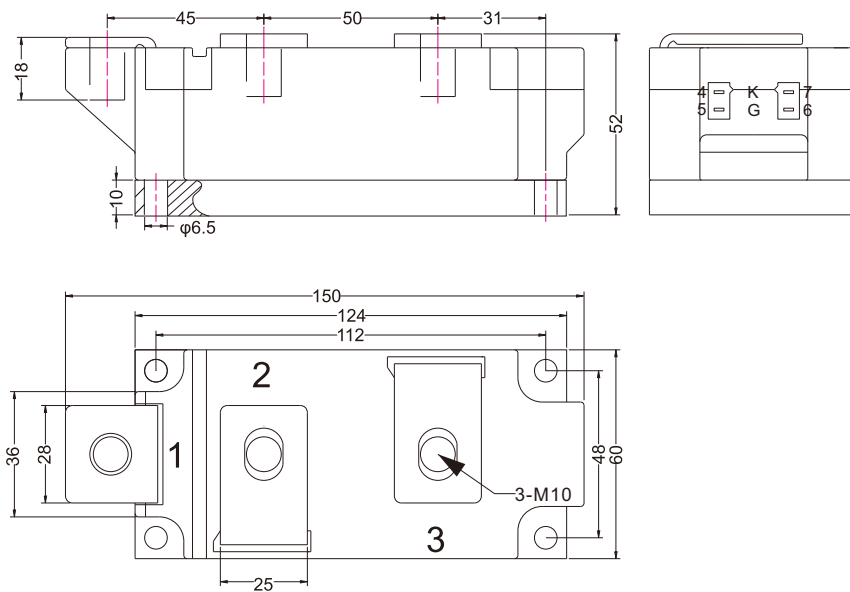


**Fig.7**



**Fig.8**

**PACKAGE OUTLINE (DIMENSIONS IN MM)**



weight: 1.5kg

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