



Rectifier Diode Modules

VRRM 800 to 1800V

IFAV 800 A

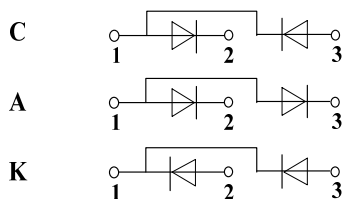
Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

Features

- Blocking voltage: 800 to 1800V
- Heat transfer through aluminum oxide ceramic isolated metal baseplate

Circuit



Module Type

TYPE			VRRM	VRSM
MD800C08D6	MD800A08D6	MD800K08D6	800V	900V
MD800C12D6	MD800A12D6	MD800K12D6	1200V	1300V
MD800C16D6	MD800A16D6	MD800K16D6	1600V	1700V
MD800C18D6	MD800A18D6	MD800K18D6	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=85°C	800	A
IFSM	t=10mS Tvj =45°C	30000	A
i ² t	t=10mS Tvj =45°C	4500000	A ² s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals(M12)	9±15%	Nm
Ms	To heatsink(M8)	5±15%	Nm
Weight	Module (Approximately)	3500	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.03	°C/W
Rth(c-s)	Module	0.01	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =2400A	—	—	1.8	V
IRD	Tvj=TvjM VRD=VRRM	—	—	35	mA

Performance Curves

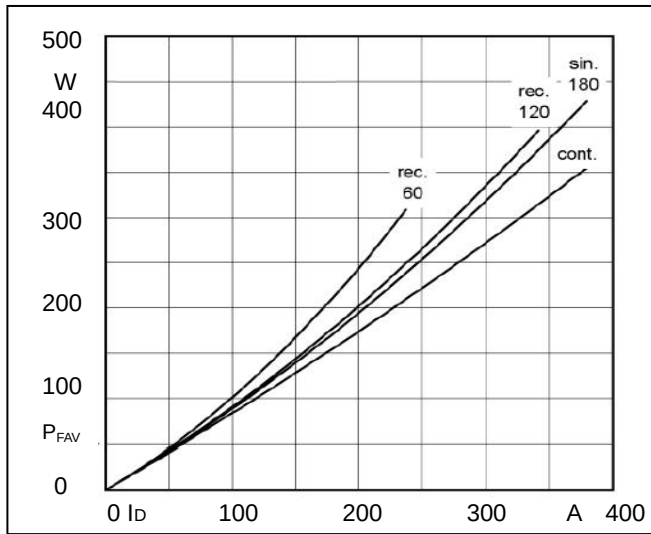


Fig1. Power dissipation

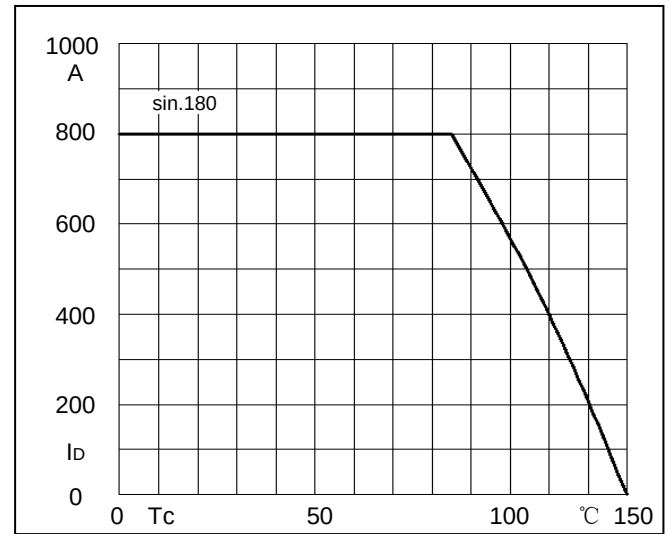


Fig2. Forward Current Derating Curve

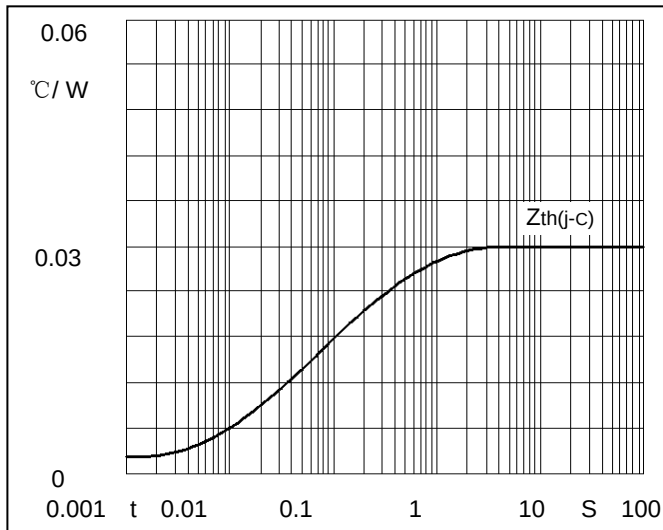


Fig3. Transient thermal impedance

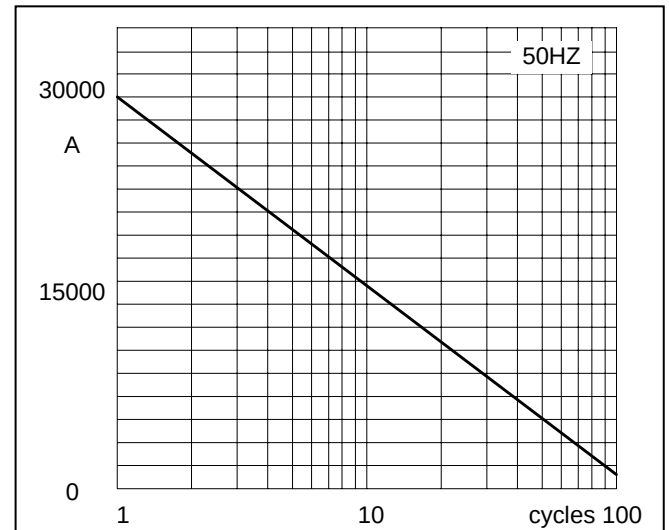


Fig4. Max Non-Repetitive Forward Surge Current

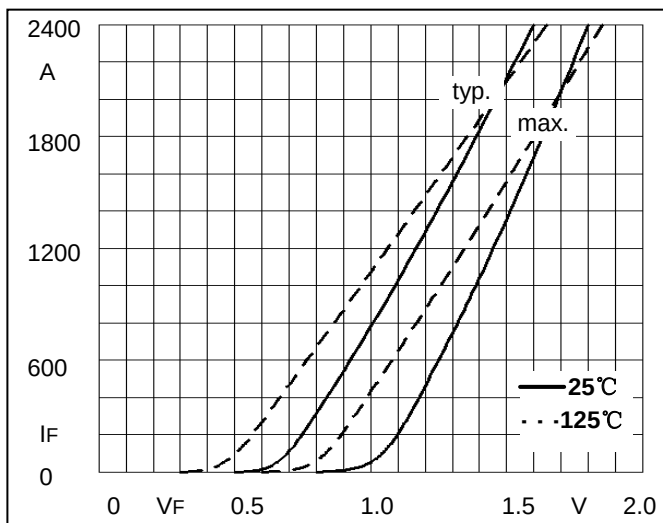
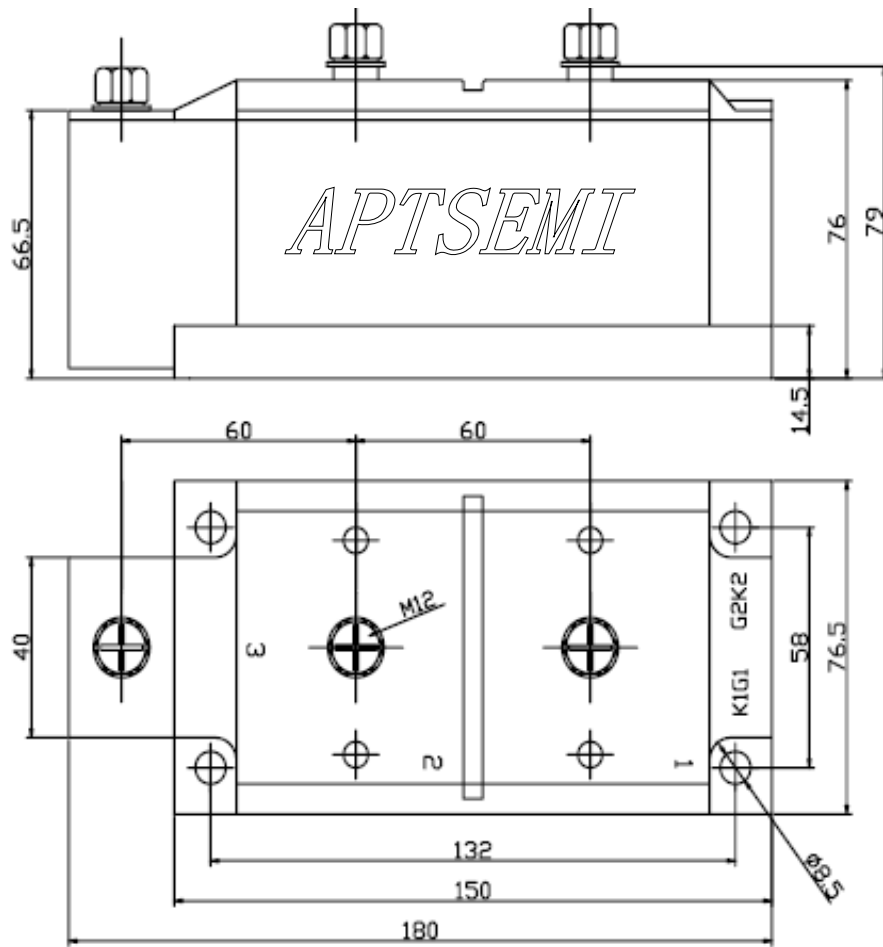


Fig5. Forward Characteristics

Package Outline Information

CASE: D6



Dimensions in mm