

Rectifier Diode Modules



VRRM 800 to 1800V

IFAV 800 Amp

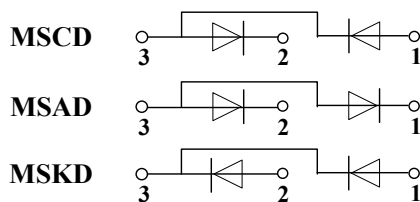
Applications

- 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 nitride ceramic isolated metal baseplate

Circuit



Module Type

TYPE			VRRM	VRRM
MSCD800-08	MSAD800-08	MSKD800-08	800V	900V
MSCD800-12	MSAD800-12	MSKD800-12	1200V	1300V
MSCD800-16	MSAD800-16	MSKD800-16	1600V	1700V
MSCD800-18	MSAD800-18	MSKD800-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Tc=85°C	800	A
IFSM	t=10mS Tvj =45°C	30000	A
i²t	t=10mS Tvj =45°C	4500000	A²s
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	3500	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Module	0.032	°C/W
Rth(c-s)	Module	0.01	°C/W

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =2400A	1.8	V
IRD	Tvj=TvjM VRD=VRRM	≤35	mA

Performance Curves

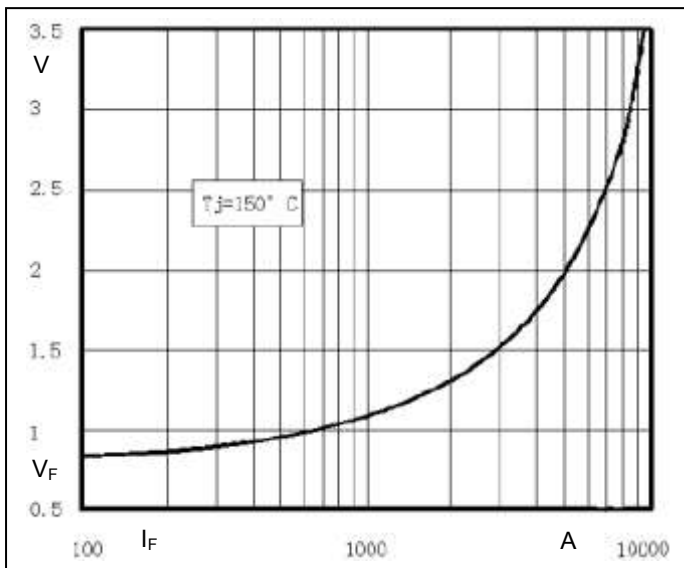


Fig1. Forward Characteristics

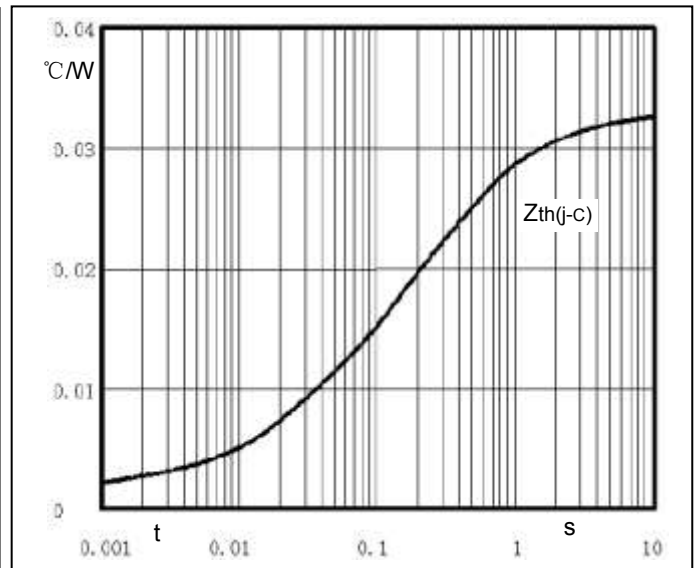


Fig2. Transient thermal impedance

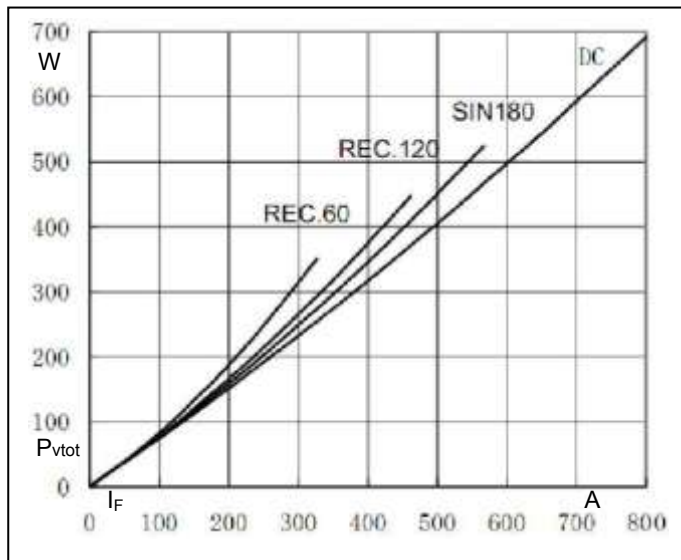


Fig3. Power dissipation

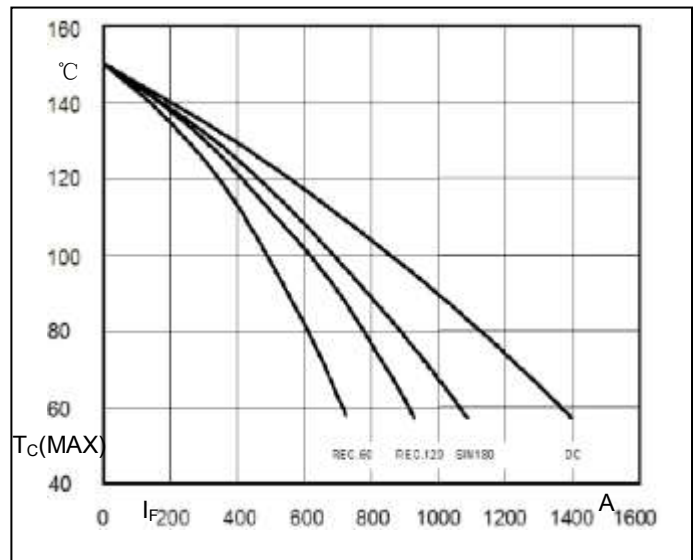


Fig4. case temperature vs. forward current

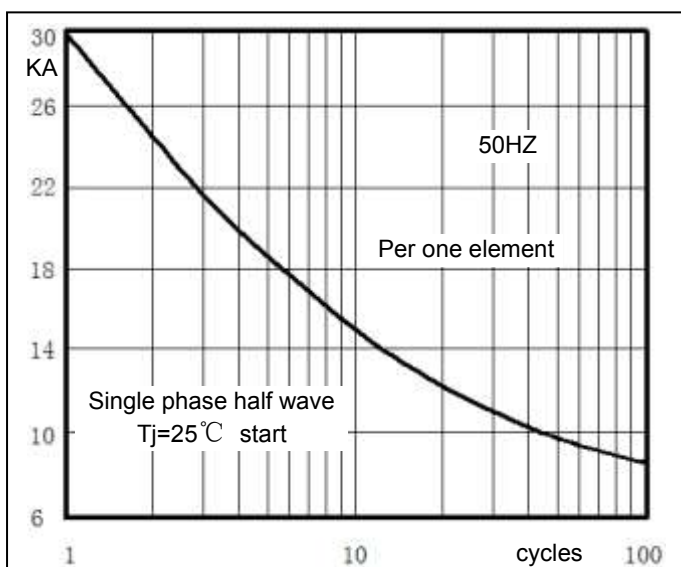
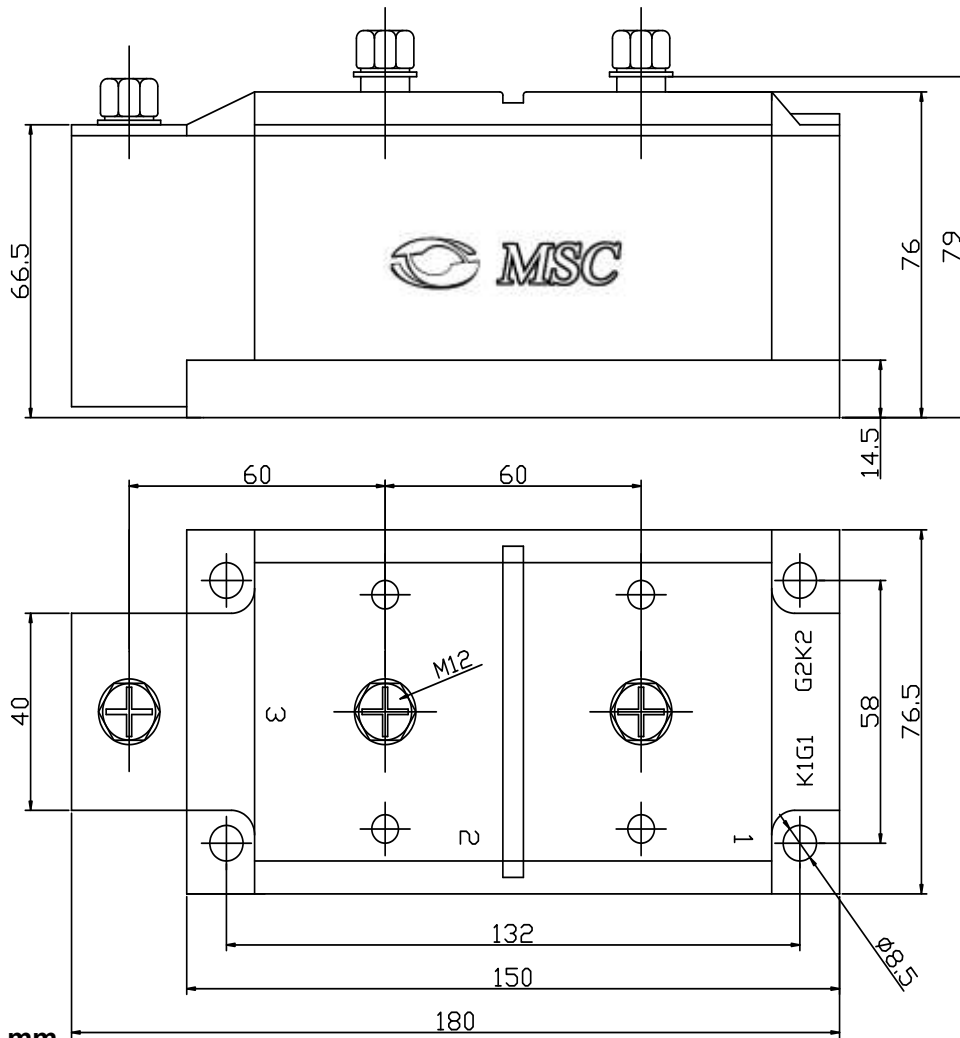


Fig5. Max Non-Repetitive Forward Surge Current

Package Outline Information

CASE: D6



Dimensions in mm