



Glass Passivated Rectifier Diode Modules

VRRM 800 to 1800V

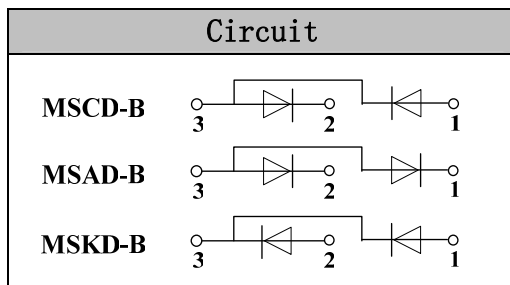
IFAV 240 Amp

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 oxide DBC ceramic isolated metal baseplate
- Glass passivated chip



Module Type

TYPE			VRRM	VRSM
MSCD240B-08	MSAD240B-08	MSKD240B-08	800V	900V
MSCD240B-12	MSAD240B-16	MSKD240B-12	1200V	1300V
MSCD240B-16	MSAD240B-16	MSKD240B-16	1600V	1700V
MSCD240B-18	MSAD240B-18	MSKD240B-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180°conduction Tc=97°C	240	A
IF(RMS)	Single phase ,half wave 180°conduction Tc=87°C	360	A
IFSM	t=10mS Tvj =45°C	7500	A
i ² t	t=10mS Tvj =45°C	281250	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T _{vj}		-40 to +150	°C
T _{stg}		-40 to +125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module	240	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.16	°C/W
R _{th(c-s)}	Module	0.05	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C IF =300A	—	1.15	1.40	V
IRD	Tvj=150°C VRD=VRRM	—	—	9	mA

Performance Curves

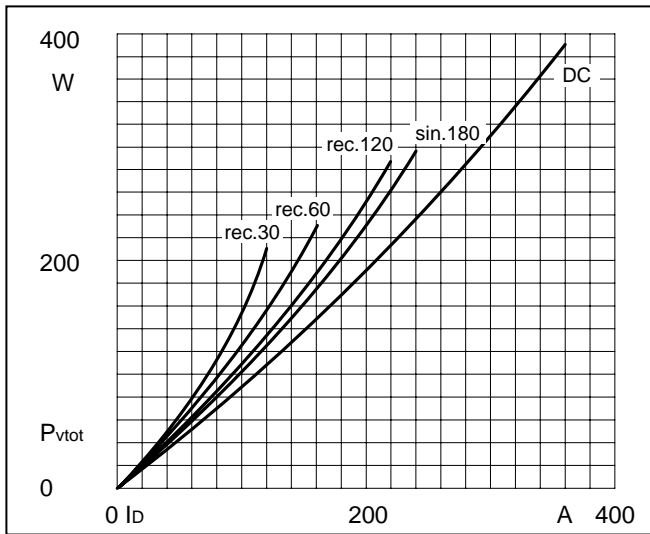


Fig1. Power dissipation

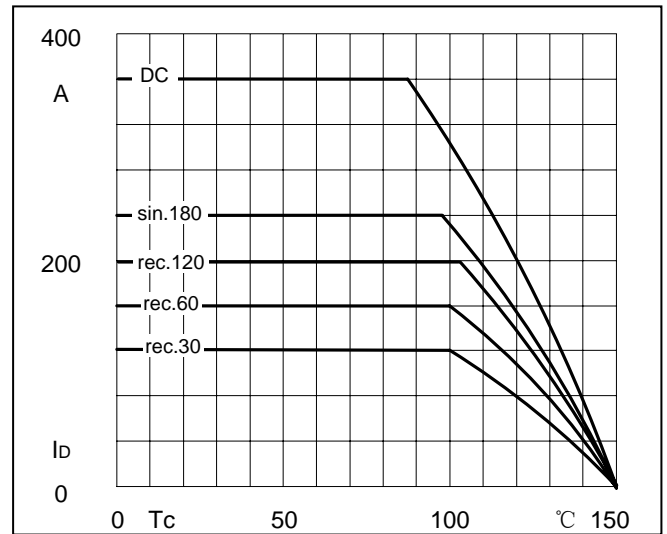


Fig2. Forward Current Derating Curve

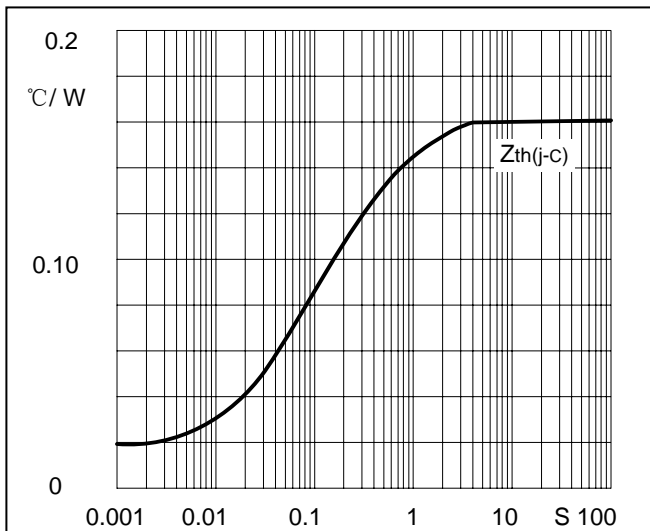


Fig3. Transient thermal impedance

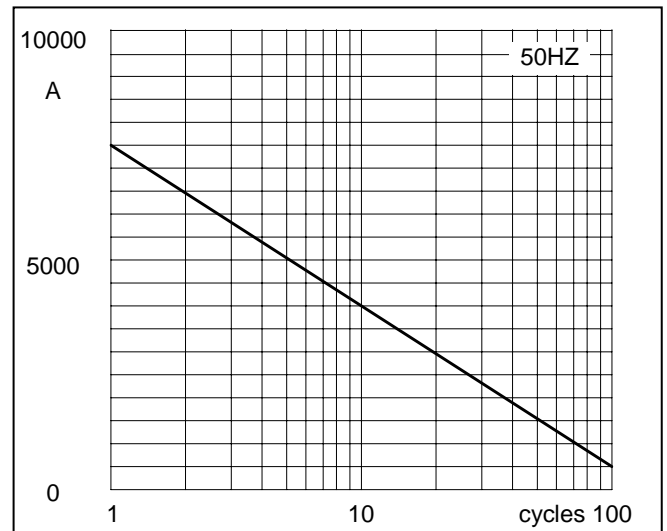


Fig4. Max Non-Repetitive Forward Surge Current

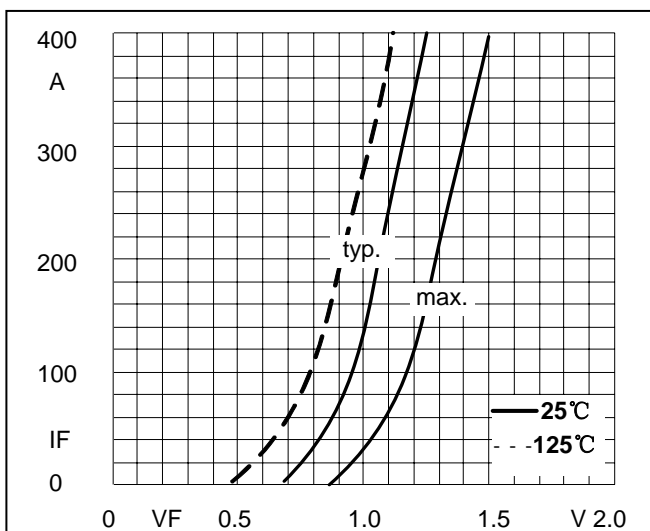


Fig5. Forward Characteristics

Package Outline Information

