

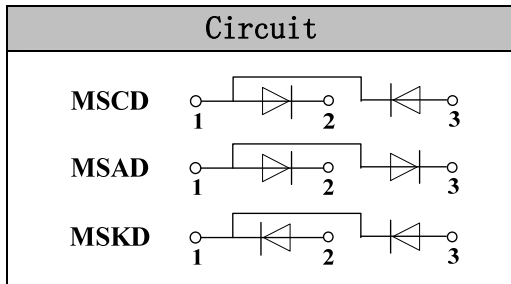


Glass Passivated Rectifier Diode Modules

VRRM 800 to 1800V
IFAV 200 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 ceramic isolated metal baseplate
- Glass passivated chip
- UL E243882 approved

Module Type

TYPE			VRRM	V _{RSM}
MSCD200-08	MSAD200-08	MSKD200-08	800V	900V
MSCD200-12	MSAD200-12	MSKD200-12	1200V	1300V
MSCD200-16	MSAD200-16	MSKD200-16	1600V	1700V
MSCD200-18	MSAD200-18	MSKD200-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction T _c =95°C	200	A
IF(RMS)	Single phase ,half wave 180° conduction T _c =102°C	240	A
IFSM	t=10mS T _{vj} =45°C	6800	A
i ² t	t=10mS T _{vj} =45°C	231200	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 (Approximately)	160	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.18	°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 I _F =300A	—	1.18	1.30	V
I _{RD}	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	9	mA

Performance Curves

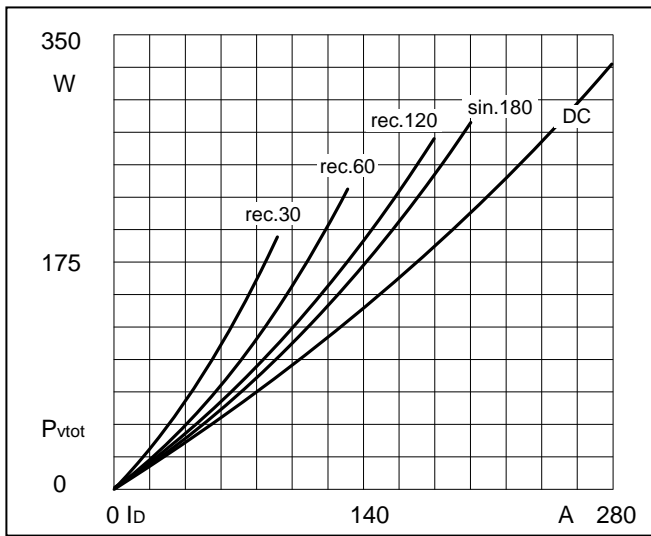


Fig1. Power dissipation

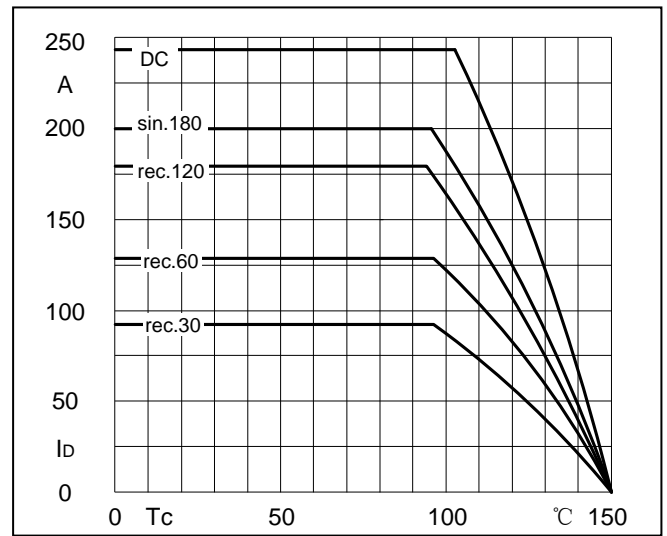


Fig2. Forward Current Derating Curve

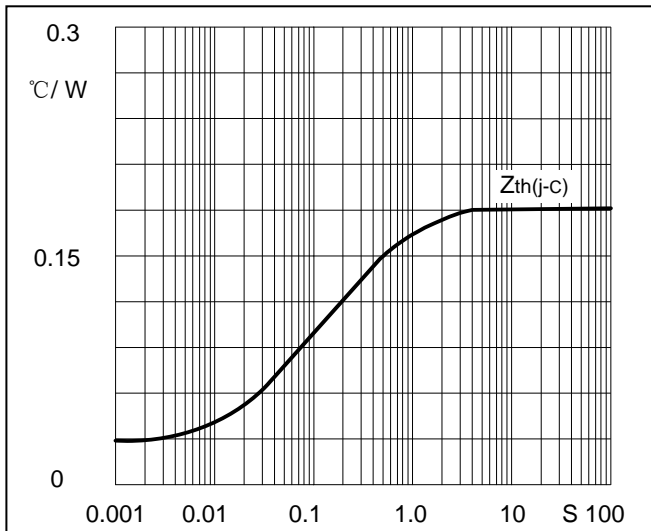


Fig3. Transient thermal impedance

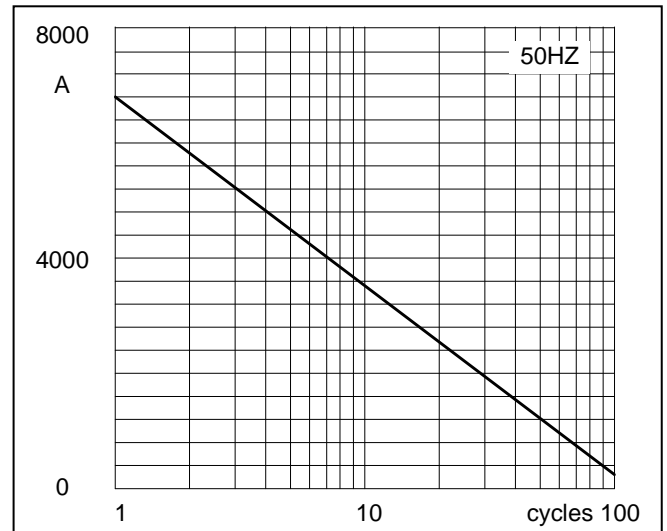


Fig4. Max Non-Repetitive Forward Surge Current

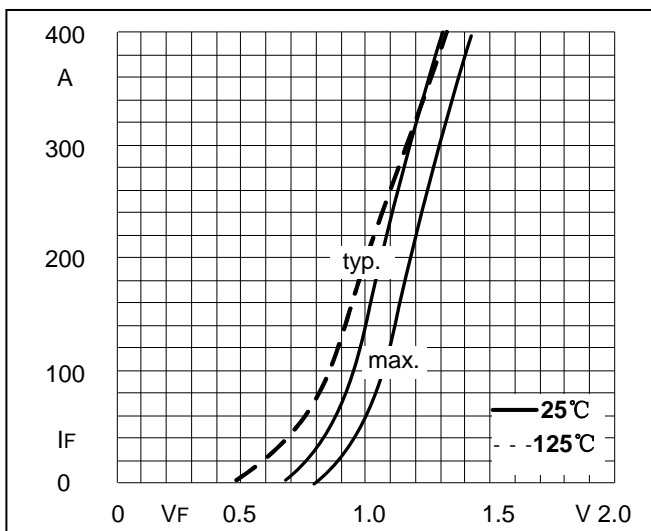


Fig5. Forward Characteristics

Package Outline Information

