

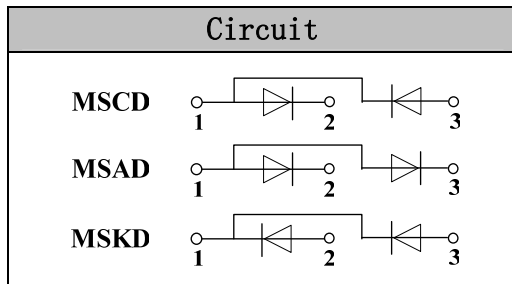


Glass Passivated Rectifier Diode Modules

VRRM 800 to 1800V
IFAV 190 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	VRSM
MSCD190-08	MSAD190-08	MSKD190-08	800V	900V
MSCD190-12	MSAD190-12	MSKD190-12	1200V	1300V
MSCD190-16	MSAD190-16	MSKD190-16	1600V	1700V
MSCD190-18	MSAD190-18	MSKD190-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Tc=100°C	190	A
IFSM	t=10mS Tvj =45°C	6600	A
i ² t	t=10mS Tvj =45°C	218000	A ² s
Visol	a. c. 50HZ;r. m. s. ;lmin	3000	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals (M6)	5 ± 15%	Nm
Ms	To heatsink (M6)	5 ± 15%	Nm
Weight	Module	160	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.18	°C/W
Rth(c-s)	Module	0.05	°C/W

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.4	V
IRD	Tvj=TvjM VRD=VRRM	≤9	mA

Performance Curves

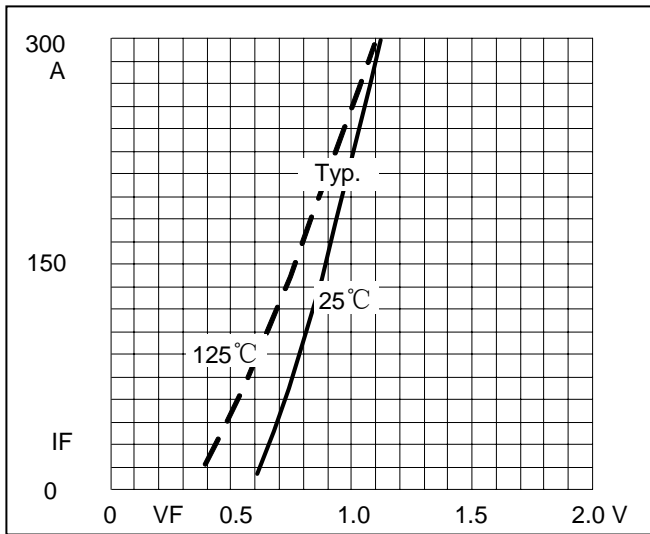


Fig1. Forward Characteristics

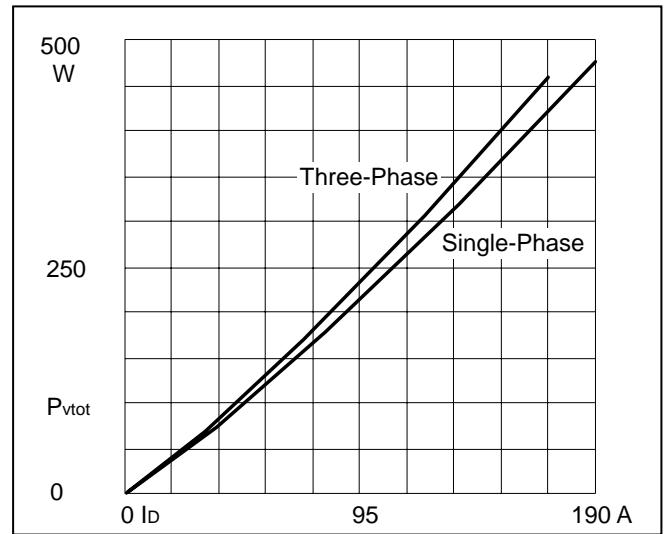


Fig2. Power dissipation

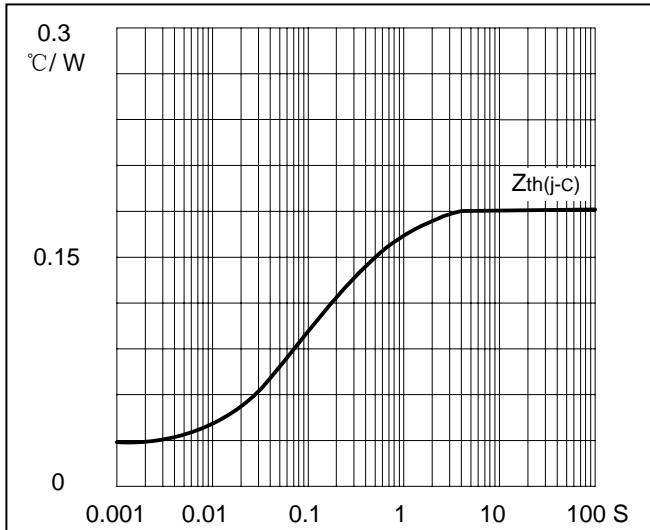


Fig3. Transient thermal impedance

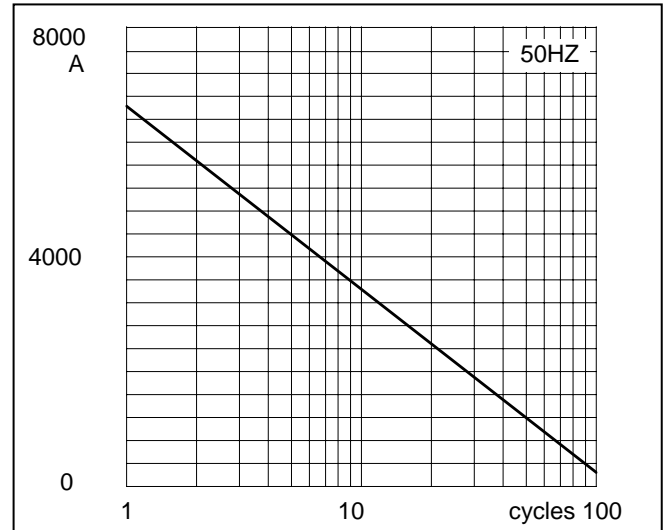


Fig4. Max Non-Repetitive Forward Surge Current

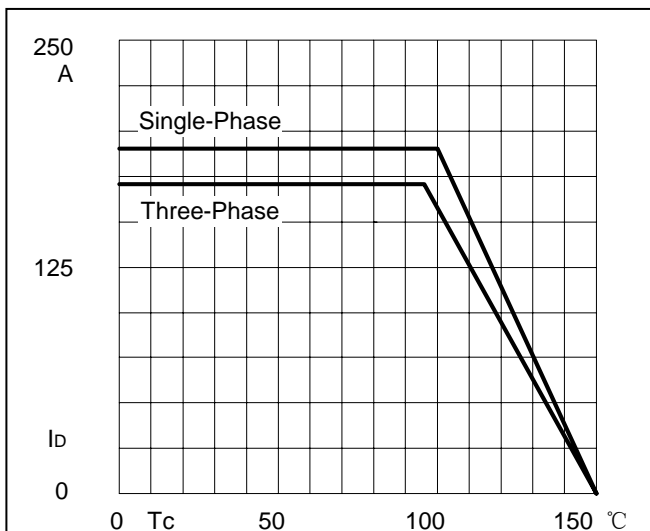


Fig5. Forward Current Derating Curve

Package Outline Information

