



Glass Passivated Rectifier Diode Modules

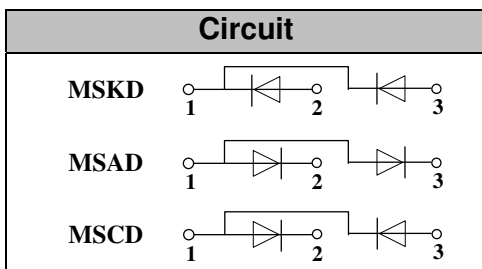
VRRM 800 to 1800V
IFAV 120 Amp

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



Module Type

TYPE			VRRM	VRSM
MSKD120-08	MSAD120-08	MSCD120-08	800V	900V
MSKD120-12	MSAD120-12	MSCD120-12	1200V	1300V
MSKD120-16	MSAD120-16	MSCD120-16	1600V	1700V
MSKD120-18	MSAD120-18	MSCD120-18	1800V	1900V

Maximum Ratings

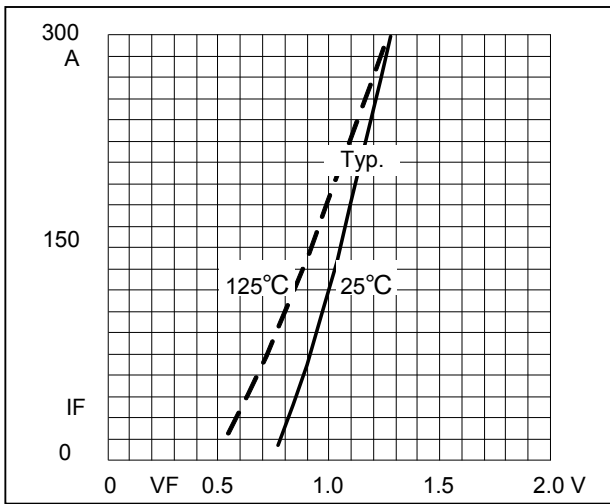
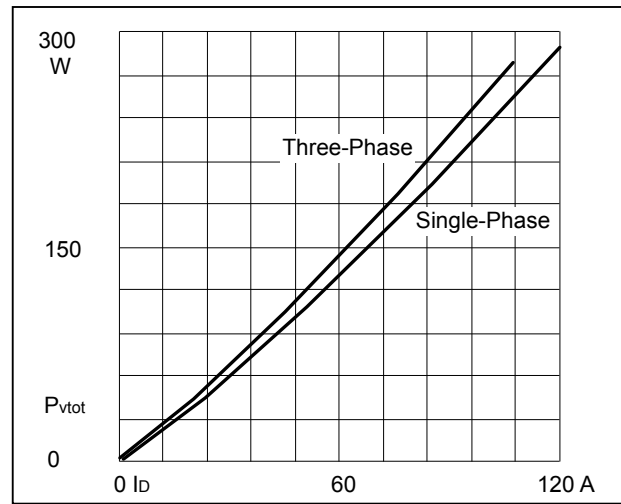
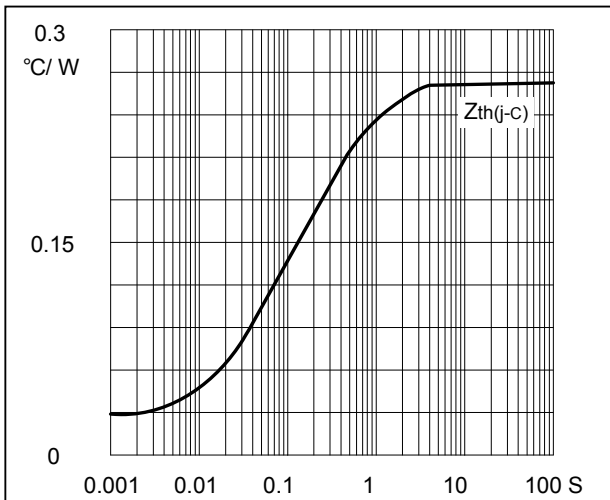
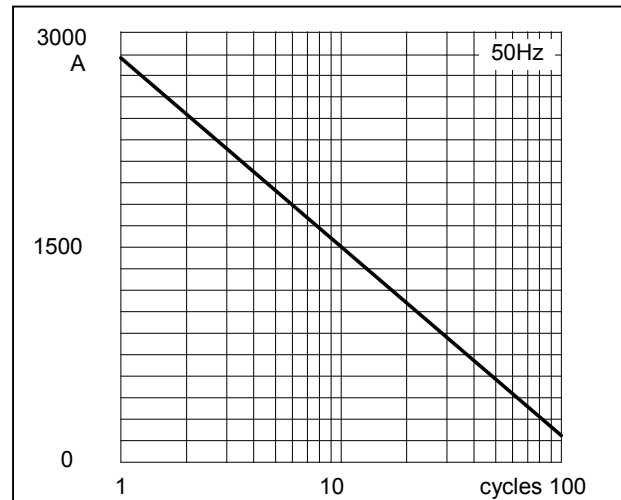
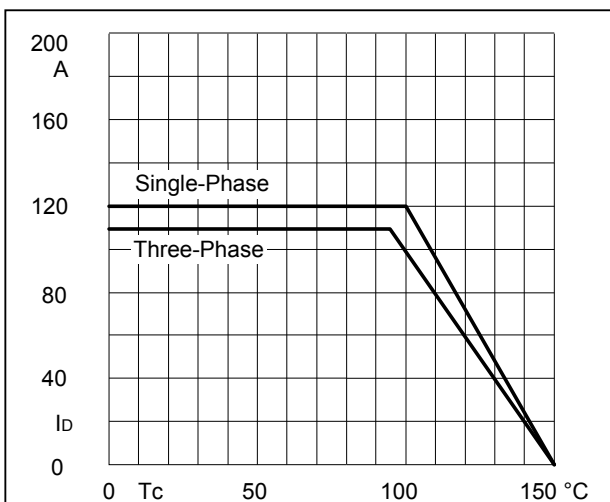
Symbol	Conditions	Values	Units
IFAV	Tc=100°C	120	A
IFSM	t=10mS Tvj =45°C	2800	A
i ² t	t=10mS Tvj =45°C	39200	A ² s
Visol	a.c.50Hz;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals(M5)	2 . 5-4	Nm
Ms	To heatsink(M5)	2 . 5-4	Nm
Weight	Module	110	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.26	°C/W
Rth(c-s)	Module	0.1	°C/W

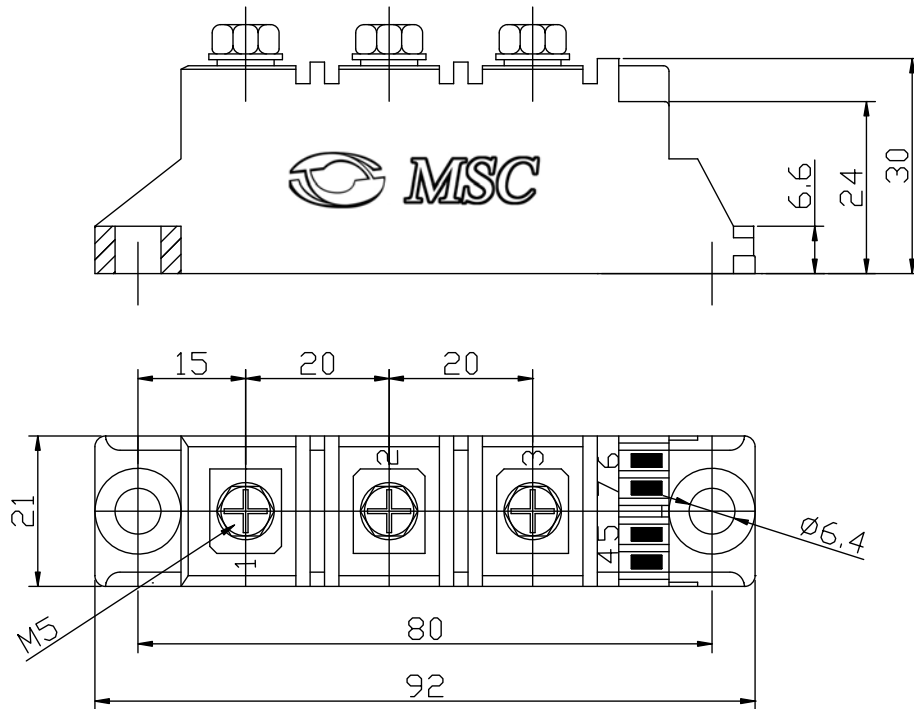
Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.43	V
IRD	Tvj=TvjM VRD=VRRM	≤6	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

CASE-D1



Dimensions in mm