

## Glass Passivated Rectifier Diode Modules



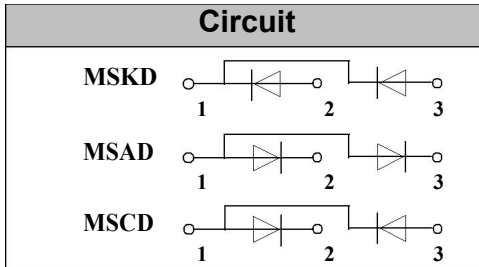
**VRRM** 800 to 1800V  
**IFAV** 100 Amp

### 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
MSKD100-08	MSAD100-08	MSCD100-08	800V	900V
MSKD100-12	MSAD100-12	MSCD100-12	1200V	1300V
MSKD100-16	MSAD100-16	MSCD100-16	1600V	1700V
MSKD100-18	MSAD100-18	MSCD100-18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Tc=100°C	100	A
IFSM	t=10mS Tvj =45°C	2500	A
i <sup>2</sup> t	t=10mS Tvj =45°C	31250	A <sup>2</sup> s
V <sub>isol</sub>	a.c.50Hz;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
T <sub>stg</sub>		-40 to 125	°C
Mt	To terminals(M5)	2 . 5-4	Nm
Ms	To heatsink(M5)	2 . 5-4	Nm
Weight	Module	110	g

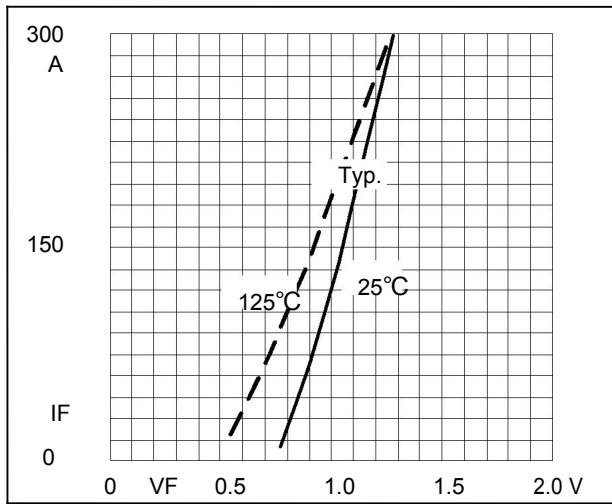
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.35	°C/W
Rth(c-s)	Module	0.1	°C/W

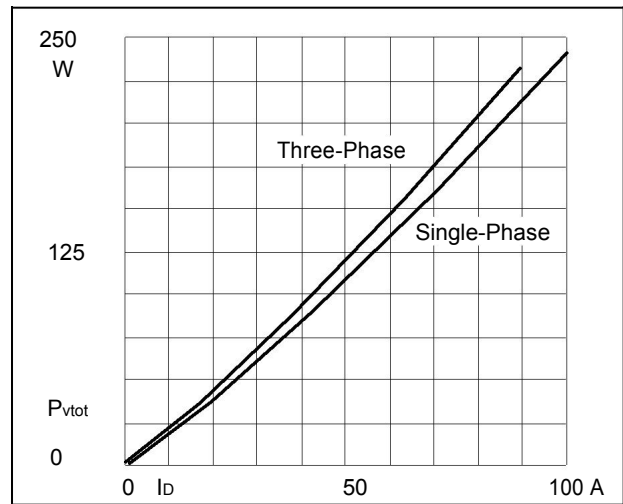
### Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.35	V
IRD	Tvj=TvjM VRD=VRRM	≤ 5	mA

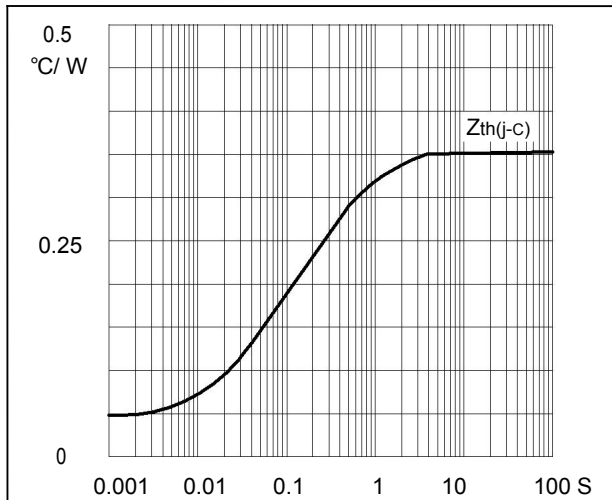
## Performance Curves



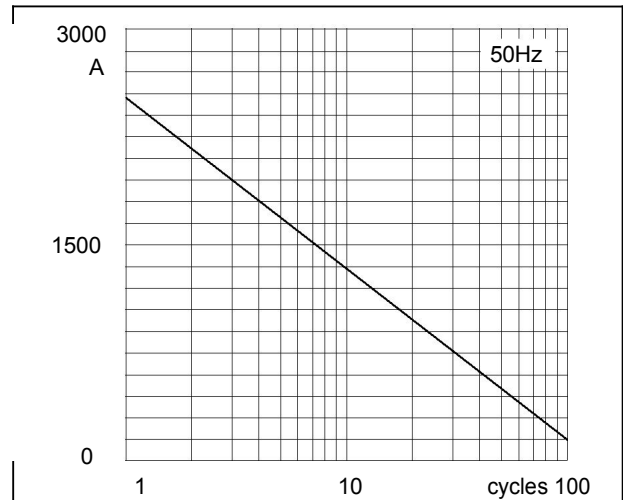
**Fig1. Forward Characteristics**



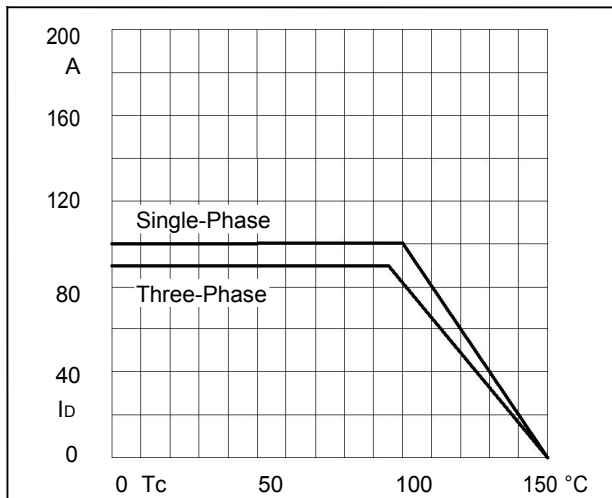
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



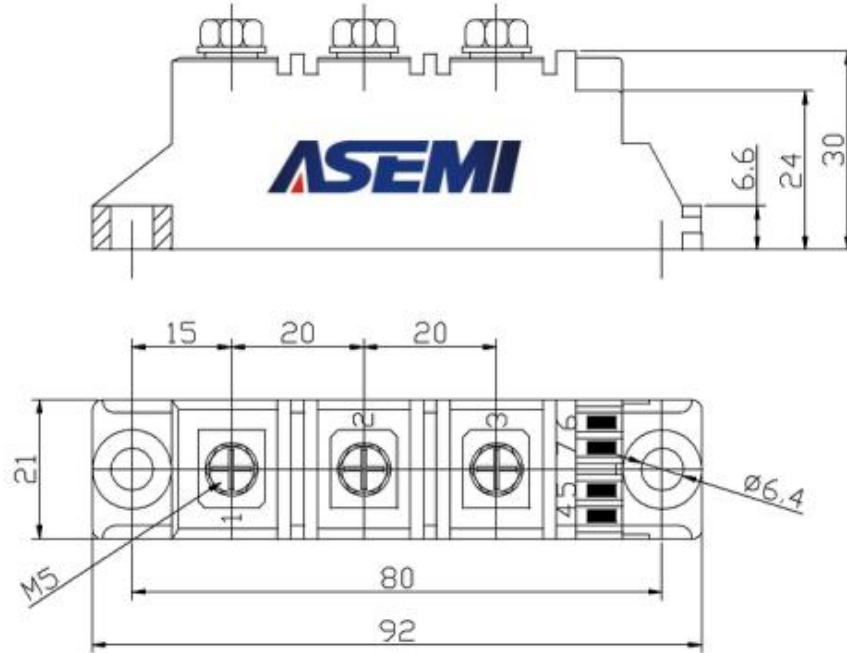
**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**

## Package Outline Information

CASE-D1



Dimensions in mm