



## Glass Passivated Rectifier Diode Modules

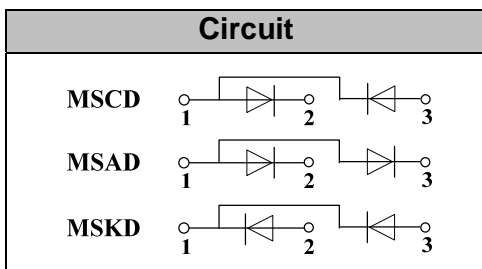
**VRRM** 800 to 1800V  
**IFAV** 165 Amp

### 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
MSKD165-08	MSAD165-08	MSCD165-08	800V	900V
MSKD165-12	MSAD165-12	MSCD165-12	1200V	1300V
MSKD165-16	MSAD165-16	MSCD165-16	1600V	1700V
MSKD165-18	MSAD165-18	MSCD165-18	1800V	1900V

### Maximum Ratings

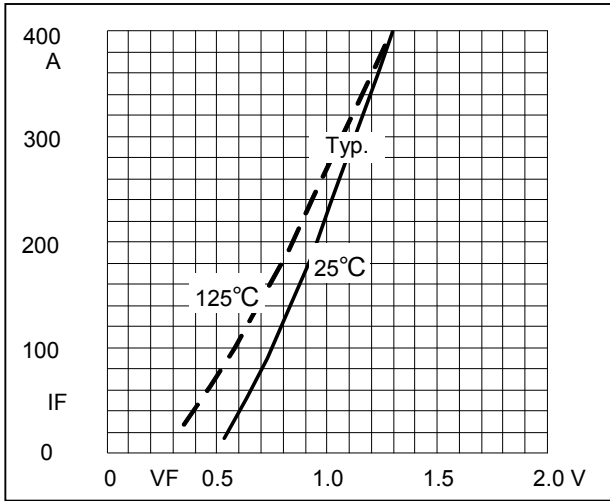
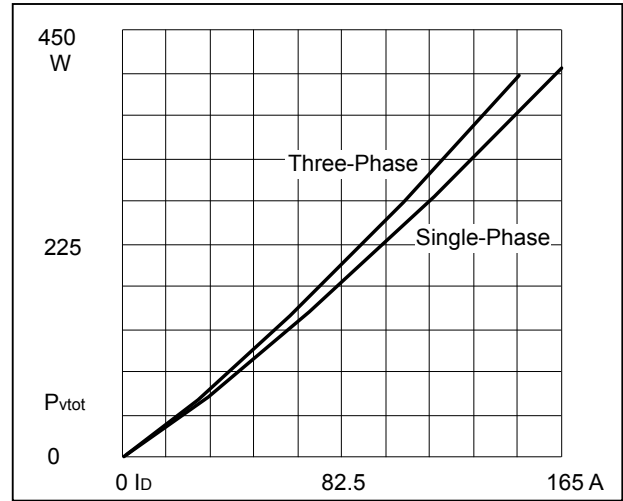
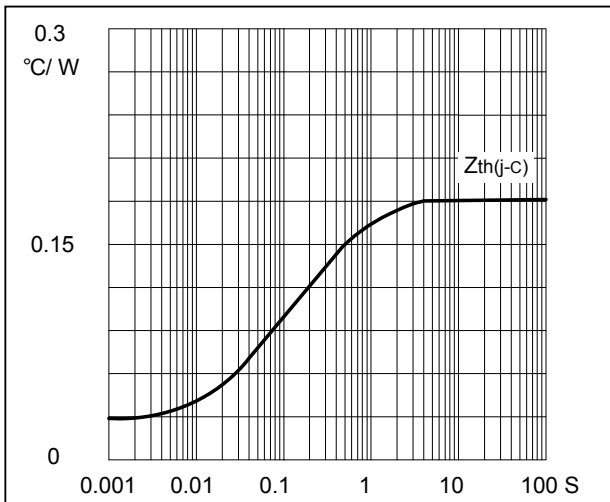
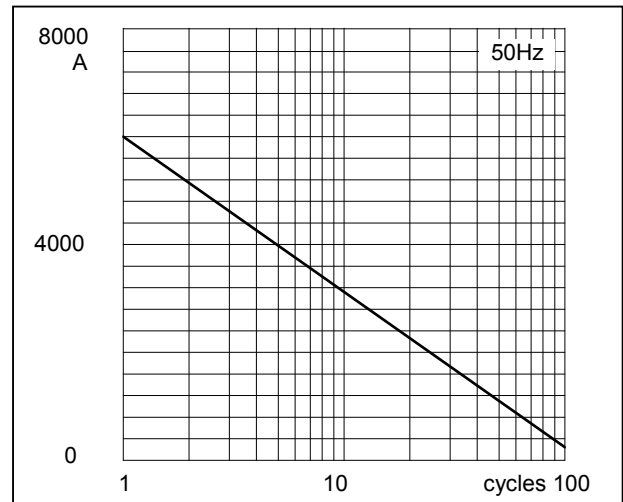
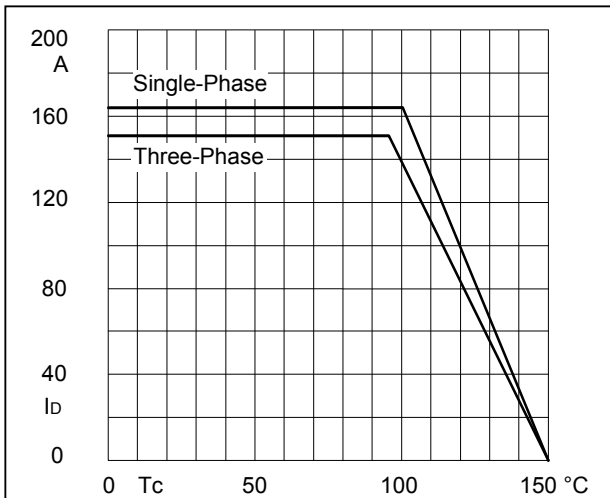
Symbol	Conditions	Values	Units
IFAV	Tc=100°C	165	A
IFSM	t=10mS Tvj =45°C	6000	A
i <sup>2</sup> t	t=10mS Tvj =45°C	180000	A <sup>2</sup> s
Visol	a.c.50Hz;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module	160	g

### 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**

