

CURRENT 110 Ampere
VOLTAGE RANG 600 to 1800 Volts

MSCD110: MSKD110: MSAD110

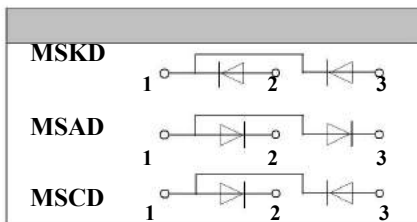


VRRM 800 to 1800V
IFAV 110 Amp

Applications

- Non-controllable rectifiers for
AC/AC converters
- ☑ Line rectifiers for transistorized AC motor controllers
 - ☑ Field supply for DC motors

Circuit



Features

- ☑ Blocking voltage: 800 to 1800V
- ☑ Heat transfer through aluminum oxide ceramic isolated metal baseplate
- ☑ Glass passivated chip

Module Type

TYPE			VRRM	V _{RSM}
MSKD110-08	MSAD110-08	MSCD110-08	800V	900V
MSKD110-12	MSAD110-12	MSCD110-12	1200V	1300V
MSKD110-16	MSAD110-16	MSCD110-16	1600V	1700V
MSKD110-18	MSAD110-18	MSCD110-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	T _c =100°C	110	A
IFSM	t=10mS T _{vj} =45°C	2500	A
i ² t	t=10mS T _{vj} =45°C	31250	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
M _t	To terminals(M5)	2 . 5-4	Nm
M _s	To heatsink(M5)	2 . 5-4	Nm
Weight	Module	110	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.35	°C/W
R _{th(c-s)}	Module	0.1	°C/W

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM =300A	1.35	V
IRD	T _{vj} =T _{vjM} V _{RD} =VRRM	≤ 5	mA

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Performance Curves

MSCD110; MSKD110; MSAD110

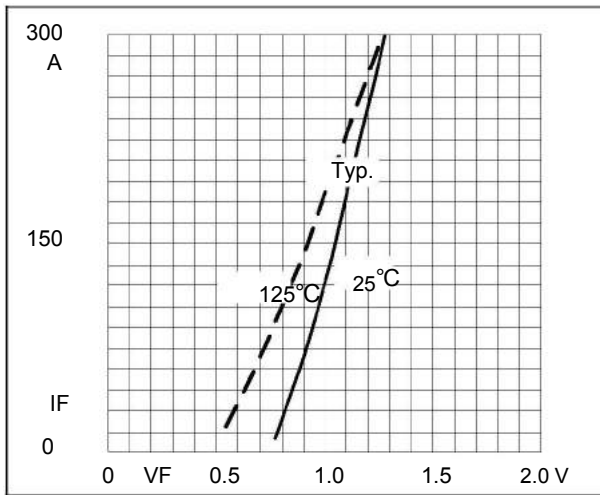


Fig1. Forward Characteristics

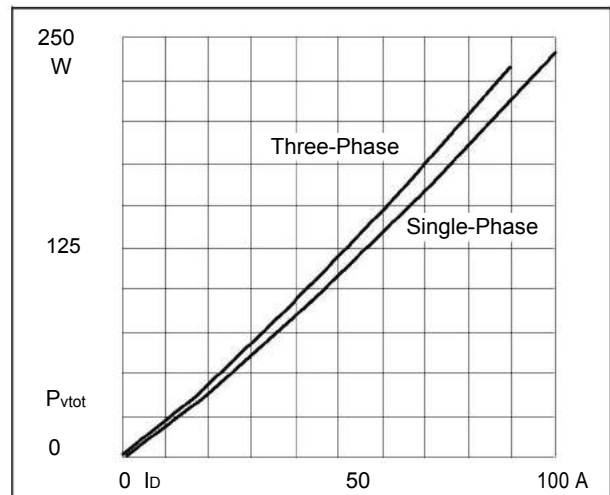


Fig2. Power dissipation

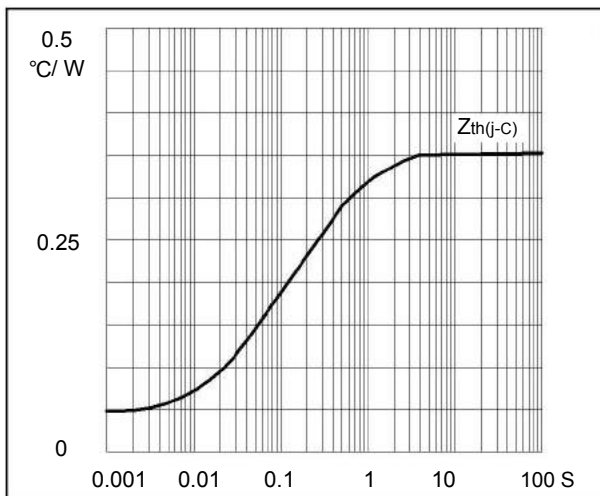


Fig3. Transient thermal impedance

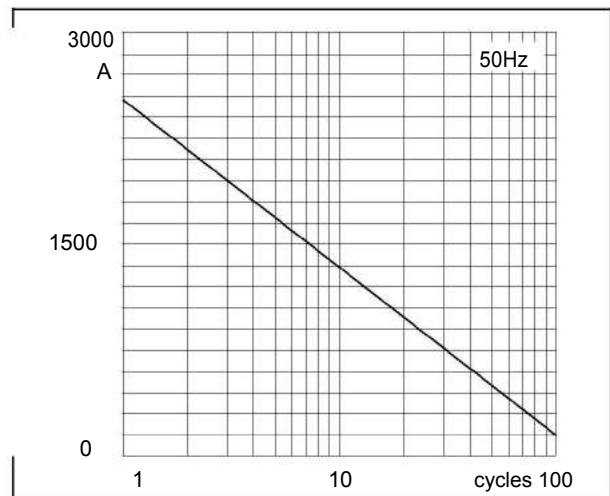


Fig4. Max Non-Repetitive Forward Surge Current

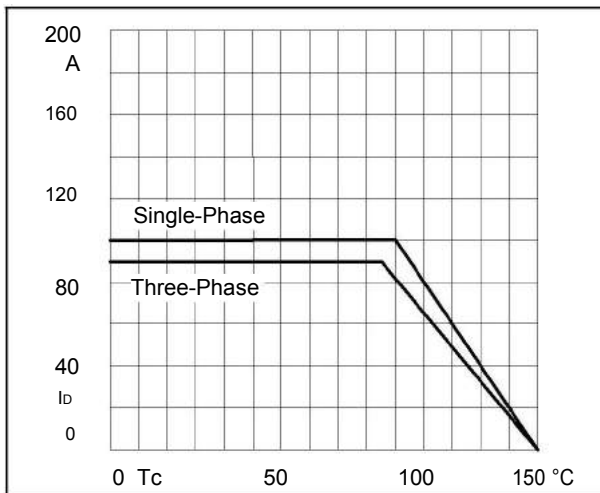


Fig5. Forward Current Derating Curve

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Package Outline Information

