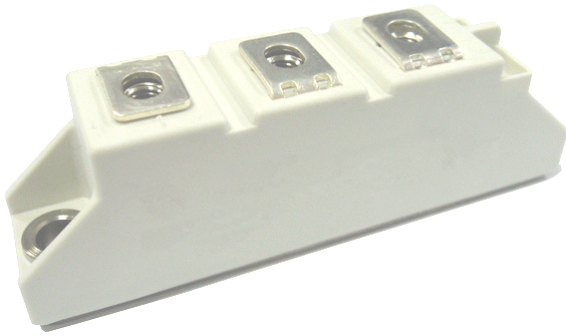




Glass Passivated Rectifier Diode Modules

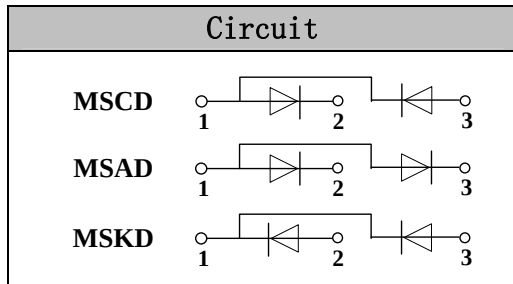
VRRM 800 to 1800V
IFAV 36 Amp

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 DBC ceramic isolated metal baseplate
- Glass passivated chip
- UL E243882 approved



Module Type

TYPE			VRRM	VSRM
MSCD36-08	MSAD36-08	MSKD36-08	800V	900V
MSCD36-12	MSAD36-12	MSKD36-12	1200V	1300V
MSCD36-16	MSAD36-16	MSKD36-16	1600V	1700V
MSCD36-18	MSAD36-18	MSKD36-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=104°C	36	A
IF(RMS)	Single phase ,half wave 180° conduction Tc=100°C	52	A
IFSM	t=10mS Tvj =45°C	650	A
i ² t	t=10mS Tvj =45°C	2100	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
Tstg		-40 to +125	°C
Mt	To terminals(M5)	3±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.0	°C/W
Rth(c-s)	Module	0.1	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C IF =100A	—	1.18	1.25	V
I _{RD}	Tvj=150°C VRD=VRRM	—	—	5	mA

Performance Curves

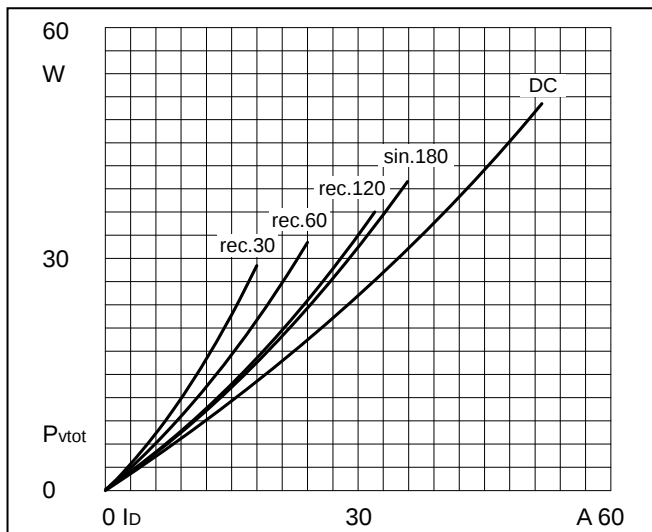


Fig1. Power dissipation

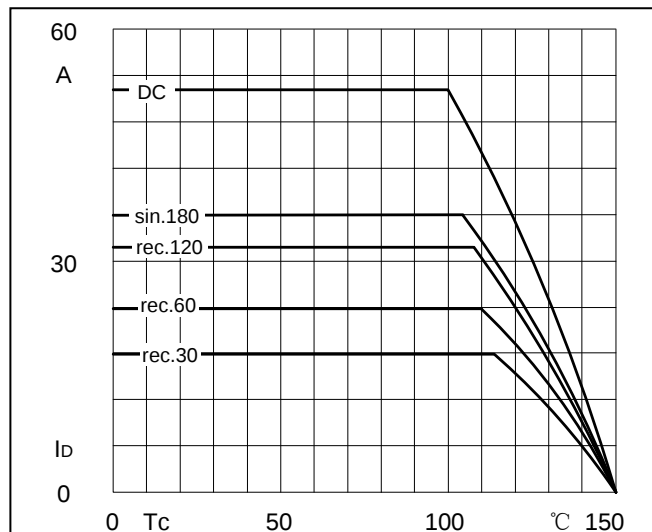


Fig2. Forward Current Derating Curve

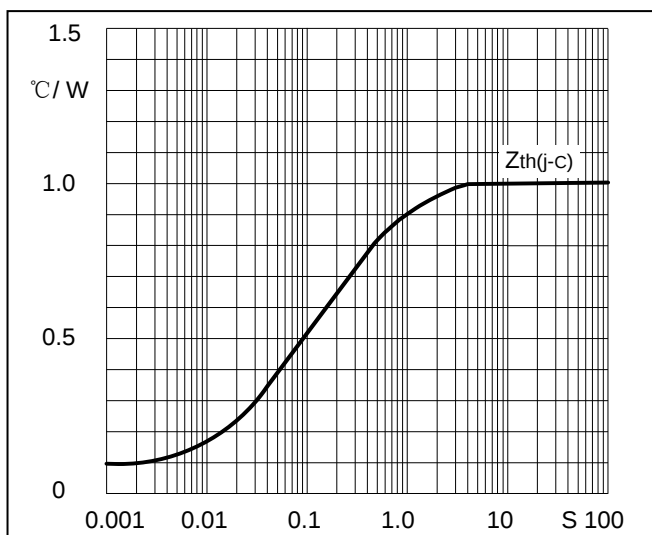


Fig3. Transient thermal impedance

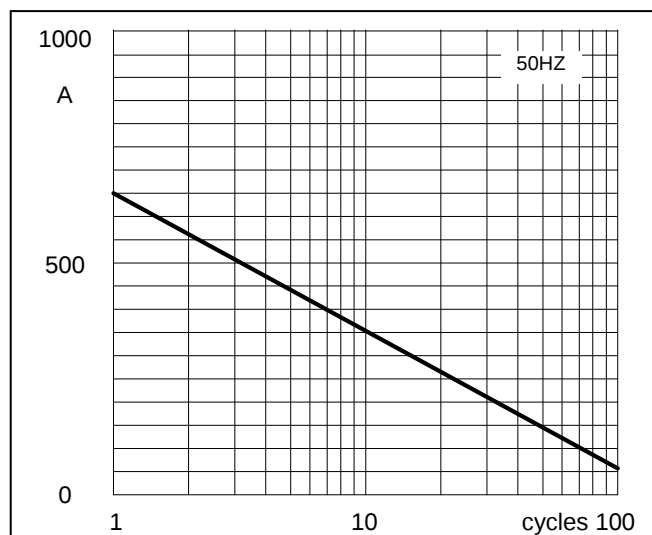


Fig4. Max Non-Repetitive Forward Surge Current

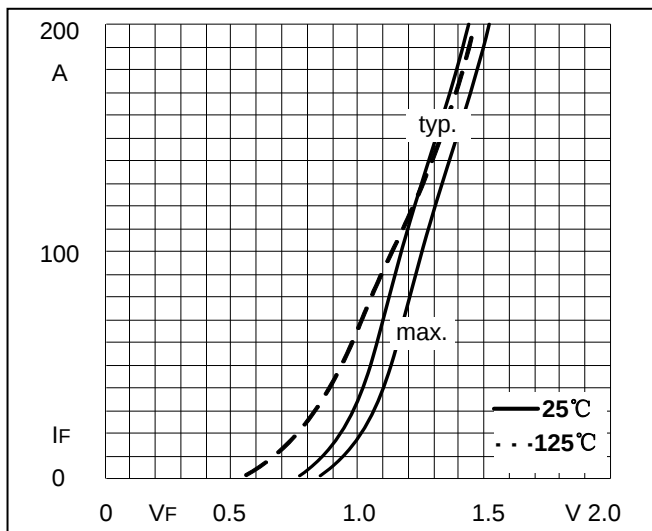
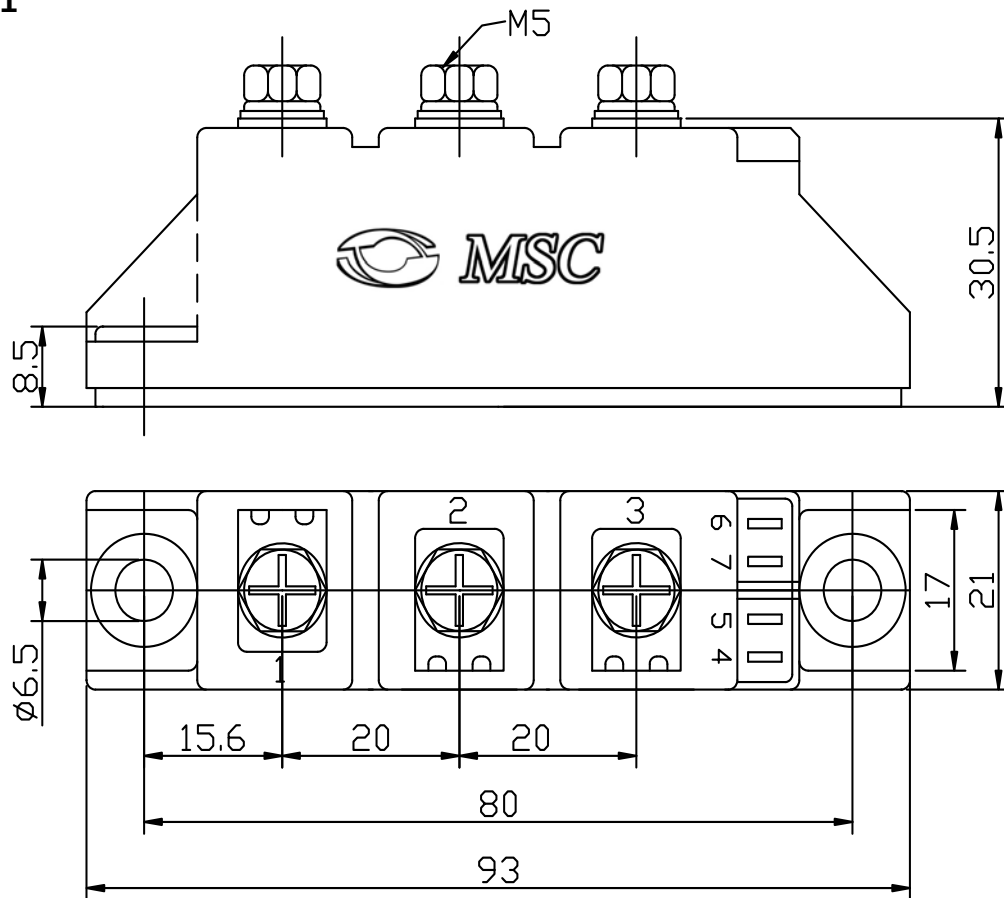


Fig5. Forward Characteristics

Package Outline Information

CASE: D1



Dimensions in mm

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Microsemi:

[MSCD36-18](#) [MSAD36-08](#) [MSCD36-16](#) [MSAD36-12](#) [MSAD36-18](#) [MSKD36-18](#) [MSKD36-08](#) [MSKD36-16](#)
[MSKD36-12](#) [MSCD36-08](#) [MSCD36-12](#) [MSAD36-16](#)