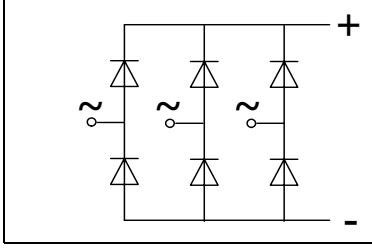


Circuit



Glass Passivated Three Phase Bridge Rectifiers

V_{RRM} 800 to 1600V
I_{FAV} 50Amp

Features

- High thermal conductivity packge,electrically insulated case
- Glass passivated chips
- High IFSM
- Epoxy compound has classification UL94V-0

Applications

- Big power supplier
- Field supply for DC motor

Module Type

TYPE	V_{RRM}	V_{RSM}
MSDP50-08 MSDP50-12 MSDP50-16	800V 1200V 1600V	900V 1300V 1700V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
$I_{F(AV)}$	Average forward current	Tc=50℃	50	A
I_{FSM}	Forward surge current, max.	t=10mS Tvj =45℃	500	A
i^2t	Value for fusing		1250	A^2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	2500	V
Tvj	Operating Junction Temperature		-40 to +150	℃
Tstg	Storage Temperature		-40 to +150	℃
Weight	Approximate Weight		20	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case	0.65	℃/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
V_{FM}	Forward Voltage Drop, max.	T=25℃ I_F=25A		1.00	1.20	V
I_{RRM}	Repetitive Peak Reverse Current, max.	Tvj =25℃ V_{RD}=V_{RRM}			5	μA
		Tvj =150℃ V_{RD}=V_{RRM}			3	mA

Performance Curves

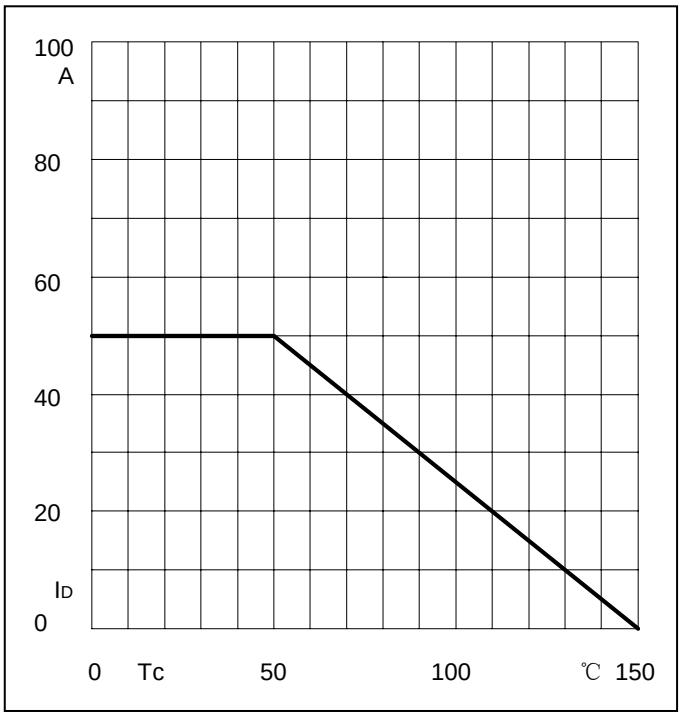


Fig1.Forward Current Derating Curve

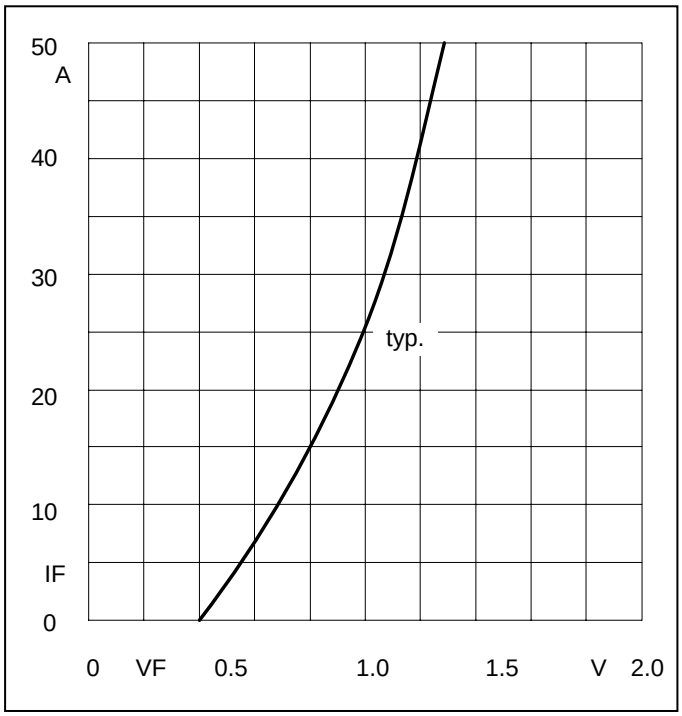


Fig2. Forward Characteristics

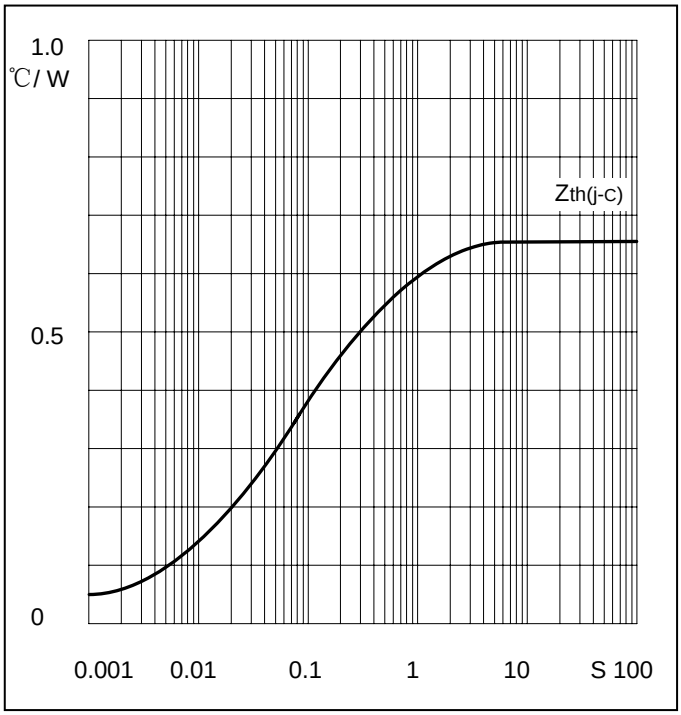


Fig3. Transient thermal impedance

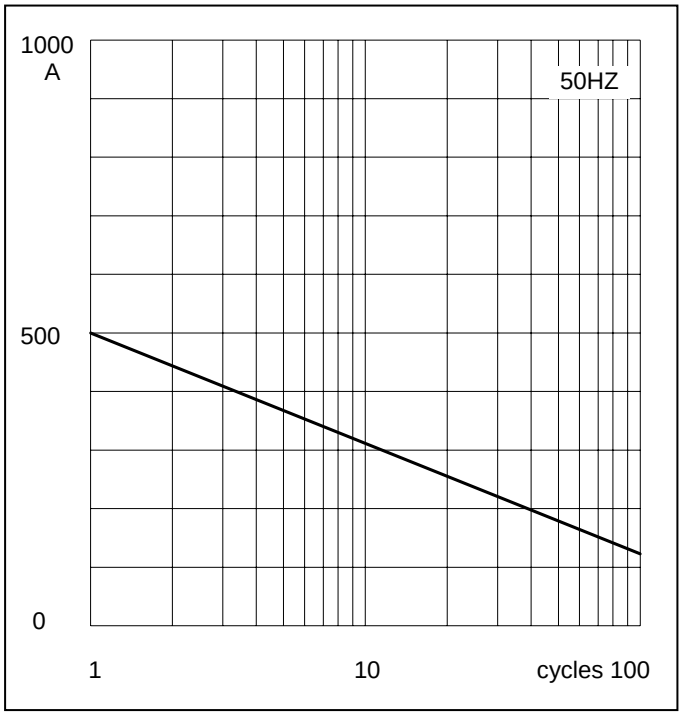
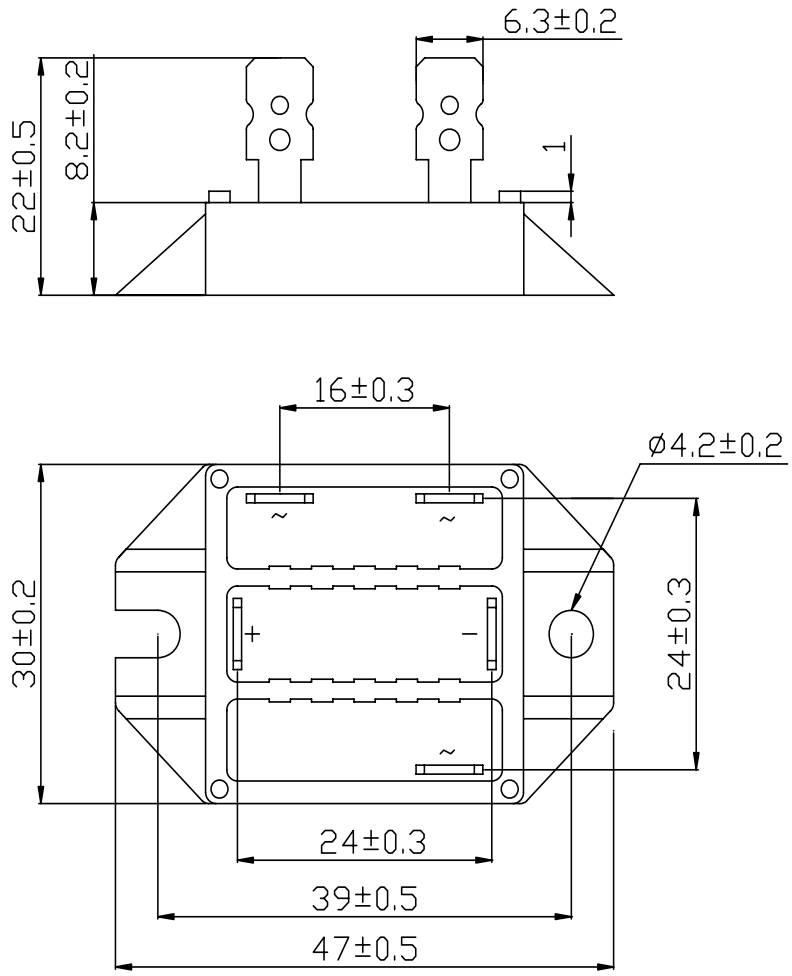


Fig4. Max Non-Repetitive Forward Surge Current

Package Outline Information

CASE：P1



Dimensions in mm