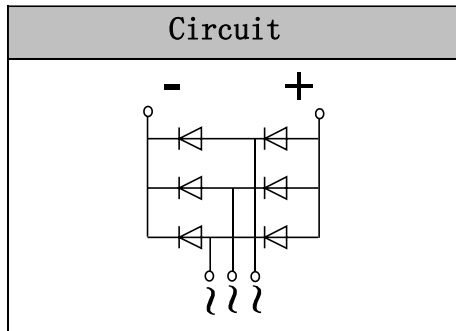


Glass Passivated Three Phase Bridge Rectifier



VRRM 1800V
IFAV 75/100/150/200 Amp

Features

- Package with DCB ceramic
- Improved temperature and power cycling
- Glass passivated chips
- High IFSM
- RoHS compliant

Applications

- Big power supplier
- Field supply for DC motor

Module Type

TYPE	IO	VRRM
SMP75A18-3	75A	1800V
SMP100A18-3	100A	1800V
SMP150A18-3	150A	1800V
SMP200A18-3	200A	1800V

Maximum Ratings

Symbol	Item	Conditions	Values	Units
IO	Average forward output current	Tc=110°C	75/100/150/200	A
IFSM	Forward surge current, max.	t=8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	1.2/1.5/1.8/2.0	KA
i ² t	Value for fusing	t=8.3mS VR=0.6VRRM	16.5	A ² s*10 ³
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min Tj=25°C Tj=110°C	2500	V
Tvj	Operating Junction Temperature		-40 to +120	°C
Tstg	Storage Temperature		-40 to +120	°C
Mt	Mounting Torque	M5/M6	4/6	N.m
Weight	Bridge(Approximately)		420	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Junction to Case	Bridge	0.1	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
VFM	Forward Voltage Drop, max.	T=25°C IF =230A	—	1.00	1.35	V
IRD	Maximum DC Reverse	Tvj =25°C VRD=VRRM Tvj =150°C VRD=VRRM	—	—	5.0 2.0	uA mA

Characteristic Curve

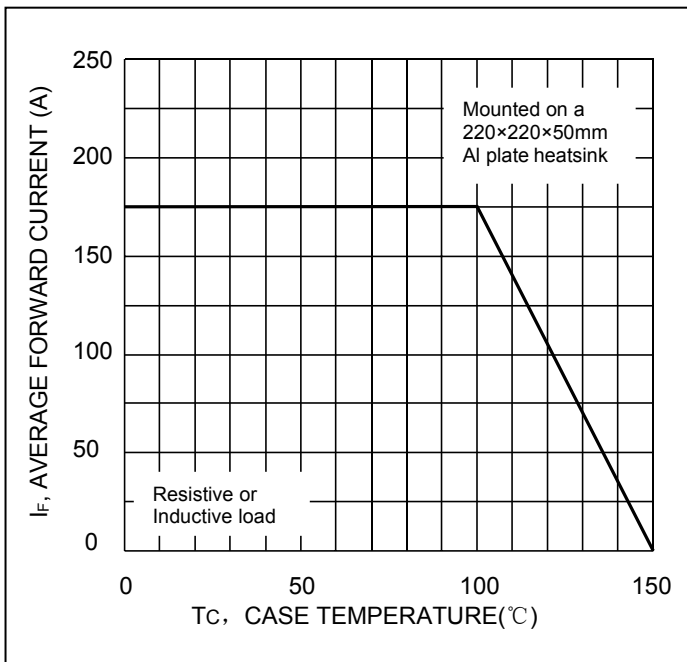


Fig. 1 Forward Current Derating Curve

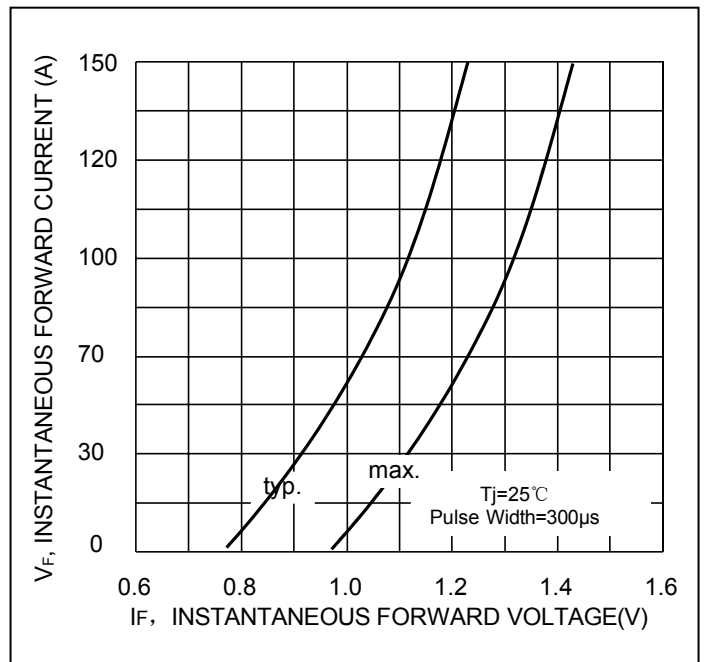


Fig.2 Typical Forward Characteristics

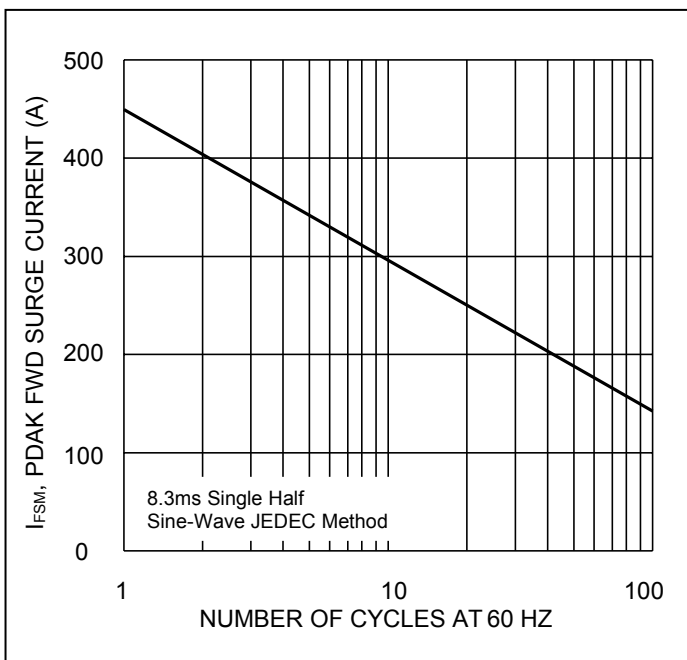


Fig.3 Max Non-Repetitive Peak Surge Current

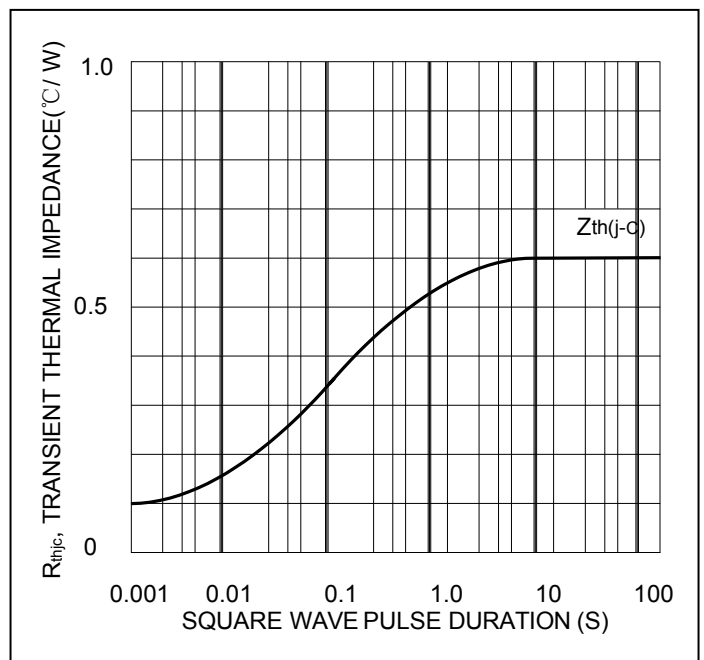
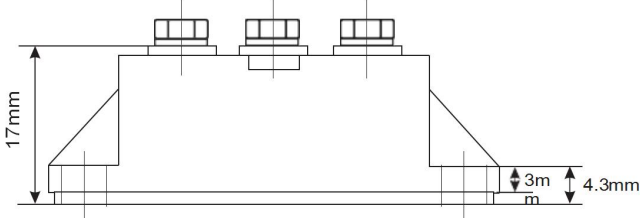
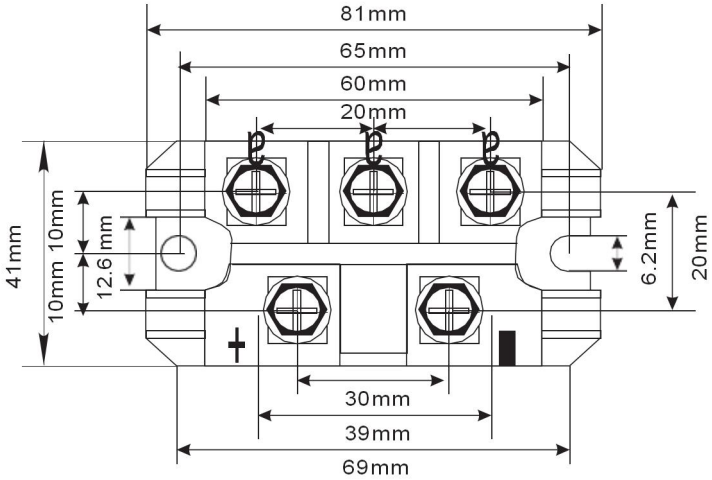


Fig.4. Transient thermal impedance

Package Outline Information



Dimensions in mm

Package Names: M52L