

Surface Mount Glass Passivated Bridge Rectifier

Voltage

800 V

Current

6A

Features



- Glass passivated chip junction
- Ideally suited for automatic assembly
- Save space on printed circuit boards
- Ultra thin profile package for space constrained utilization
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

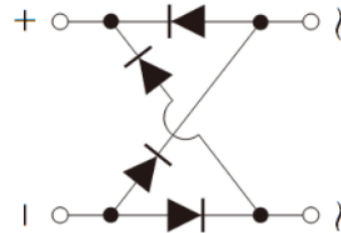
Mechanical Data

- Case : M6 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.38 grams

Application

- PD Charger
- Consumer Power Adapter
- NB Adapter
- TV Power

M6



Key Parameters	
Parameter	Value
V_{RRM}	800V
$I_F(AV)$	6A
I_{FSM}	150A
I_R	5uA
Package	M6

Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	800	V
Maximum RMS Voltage		V_{RMS}	560	V
Maximum DC Blocking Voltage		V_{DC}	800	V
Maximum Average Forward Current		$I_{F(AV)}$	6	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	I_{FSM}	150	A
	@ $T_A = 125^\circ\text{C}$		120	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	I_{FSM}	300	A
	@ $T_A = 125^\circ\text{C}$		240	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)		$I^2 t$	93.4	A^2S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$		C_J	50	pF
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	55	$^\circ\text{C/W}$
		$R_{\theta JL}$	10	
		$R_{\theta JC}$	6	
Operating junction and storage temperature range		T_J, T_{STG}	-55~150	$^\circ\text{C}$

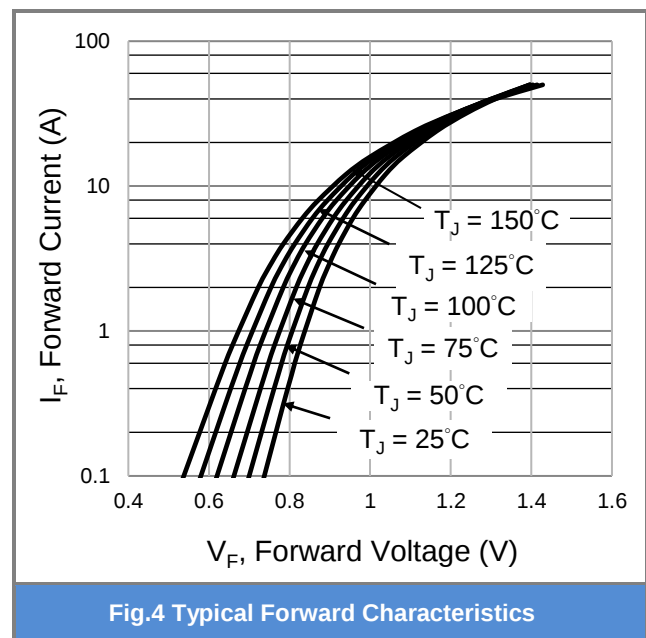
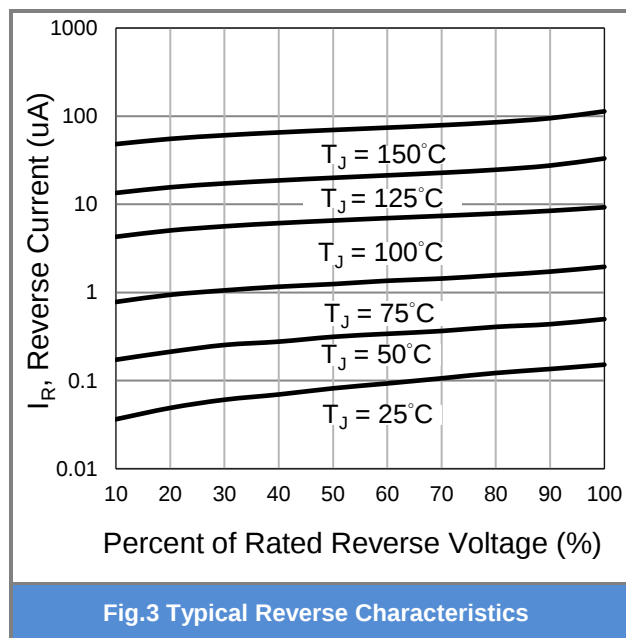
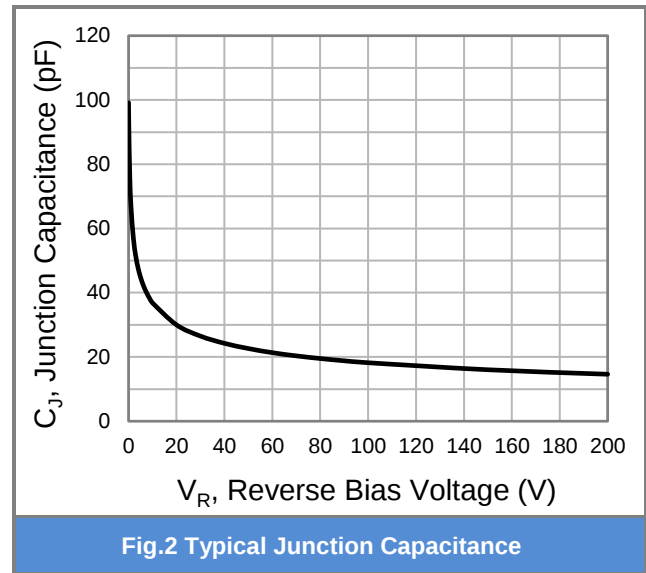
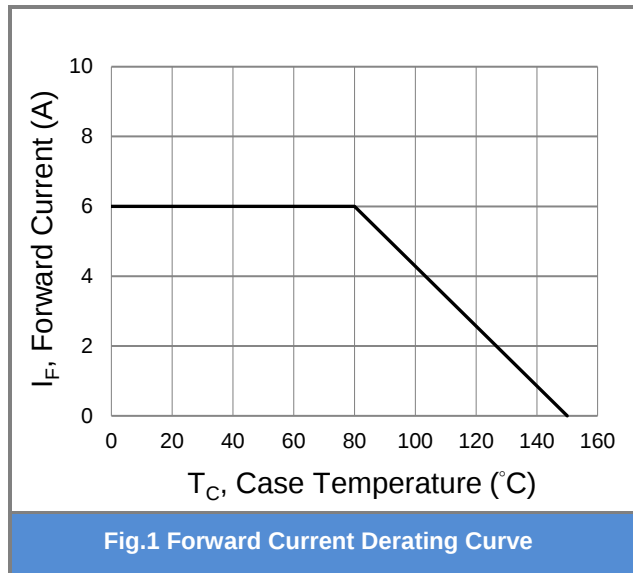
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 3\text{ A}, T_J = 25^\circ\text{C}$	-	0.90	1.0	V
		$I_F = 3\text{ A}, T_J = 125^\circ\text{C}$	-	0.80	-	
Reverse Current	I_R	$V_R = 800\text{ V}, T_J = 25^\circ\text{C}$	-	-	5	μA
		$V_R = 800\text{ V}, T_J = 125^\circ\text{C}$	-	-	100	

NOTES :

1. Device mounted on P.C.B with 35mm*25mm*1.7mm.

TYPICAL CHARACTERISTIC CURVES



Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PMSM608	M6	1.8K pcs / 13" reel	PMSM608

Packaging Information & Mounting Pad Layout

M6 Dimension

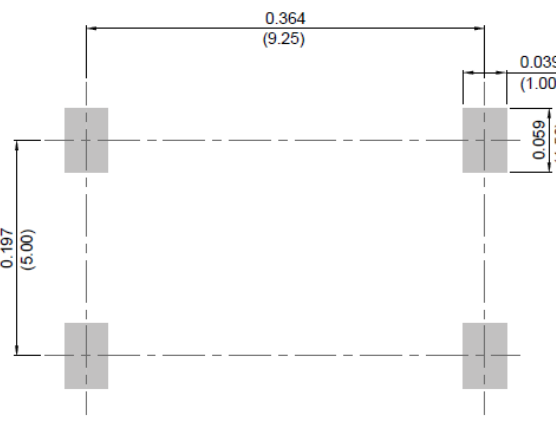
Unit: inch(mm)

The image contains three technical drawings of an M6 component:

- Side View (Left):** Shows the profile of the component with dimensions *L* (total length), *A1* (flange thickness), *r* (fillet radius), and *c* (base thickness).
- Top View (Center):** Shows the rectangular top surface with dimensions *D* (width), *m* (height), *b* (hole offset), and *e* (hole pitch). It also features a minus sign (-) on the left, a plus sign (+) on the right, and a circular feature on the right edge.
- Cross-sectional View (Bottom):** Shows the internal structure with dimension *A* indicating the internal height.

M6 Dimension.Unit:Inch (mm)

Dim	Unit (Inch)		Unit (mm)	
	Min	Max	Min	Max
A	0.055	0.071	1.40	1.80
A1	-	0.006	-	0.15
b	0.051	0.059	1.30	1.50
c	0.008	0.012	0.20	0.30
D	0.394	0.409	10.00	10.40
E	0.268	0.283	6.80	7.20
E1	0.382	0.398	9.70	10.10
e	0.193	0.201	4.90	5.10
L	0.02	0.043	0.50	1.10

M6 Pad Layout	Unit: inch(mm)
	

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