

Surface Mount Glass Passivated Bridge Rectifier

Voltage

800 V

Current

4A

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

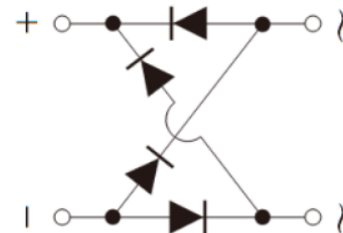
Mechanical Data

- 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
$I_F(AV)$	4A
I_{FSM}	120A
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	$I_{F(AV)}$	4	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	120	A
	@ $T_A = 125^\circ\text{C}$	96	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	240	A
	@ $T_A = 125^\circ\text{C}$	192	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	60	A^2S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	C_J	37	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55	$^\circ\text{C/W}$
	$R_{\theta JL}$	10	
	$R_{\theta JC}$	5	
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	$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	0.90	1.0	V
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	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. Mounted on a FR4, 35mmx25mmx1.7mm, 2oz copper pad area.

TYPICAL CHARACTERISTIC CURVES

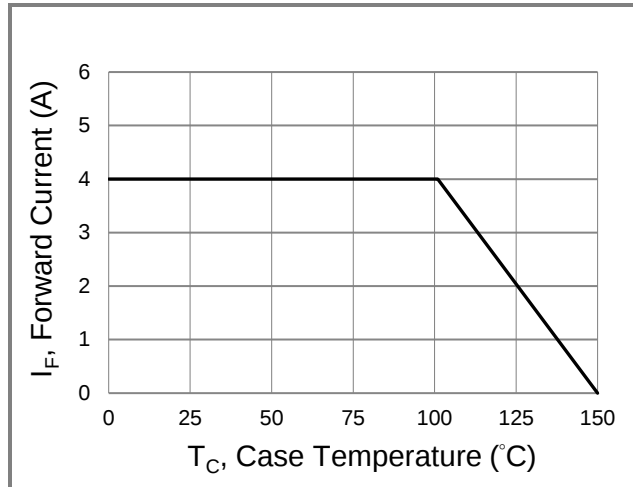


Fig.1 Forward Current Derating Curve

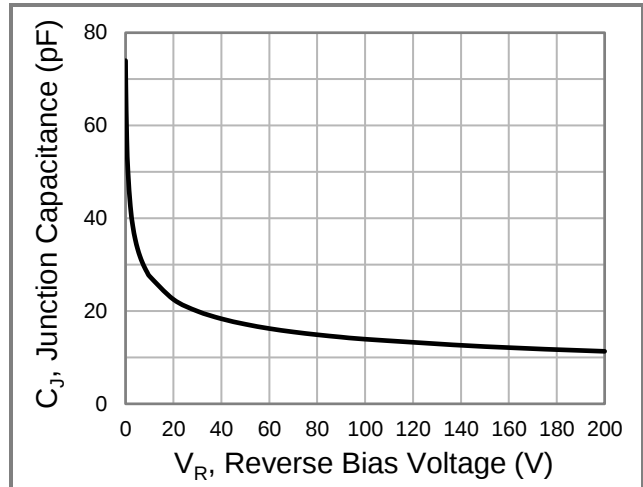


Fig.2 Typical Junction Capacitance

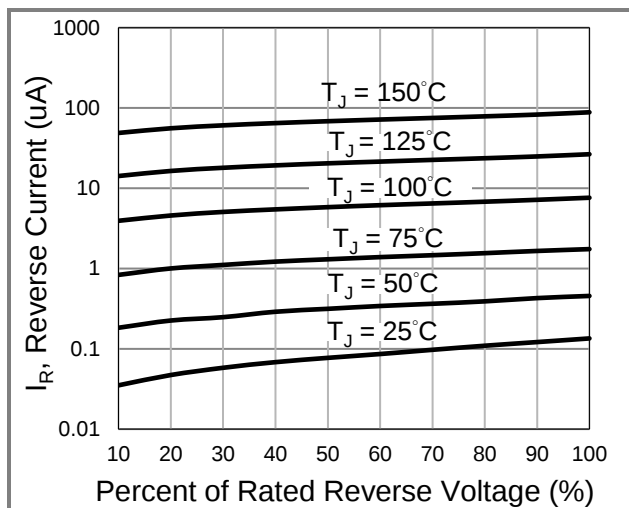


Fig.3 Typical Reverse Characteristics

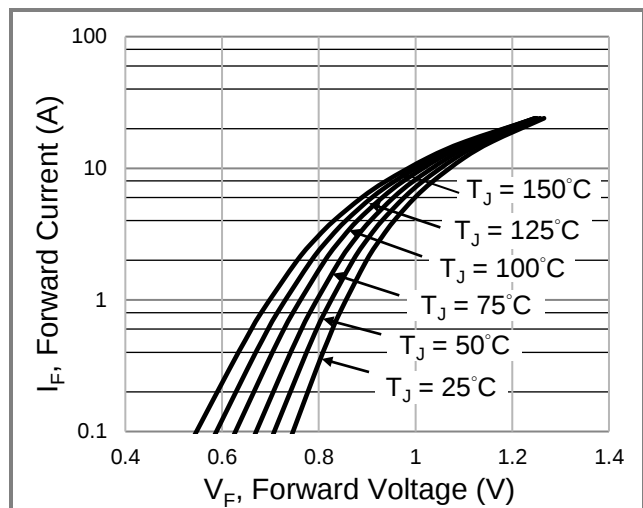


Fig.4 Typical Forward Characteristics

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PMSM408	M6	1.8K pcs / 13" reel	PMSM408

Packaging Information & Mounting Pad Layout

M6 Dimension

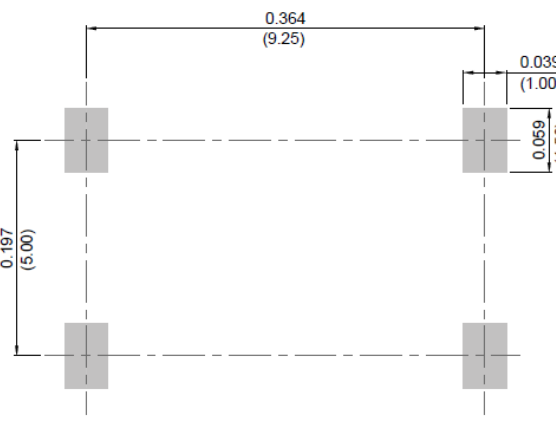
Unit: inch(mm)

The image displays three technical views 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 (flange width), and e (center-to-center distance between mounting holes). It also features a minus sign (-) on the left, a plus sign (+) on the right, and a circular feature on the right edge.
- Bottom View (Right):** Shows the underside of the component with dimension A (thickness).

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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