

## Surface Mount Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

3A

### 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

**M4**

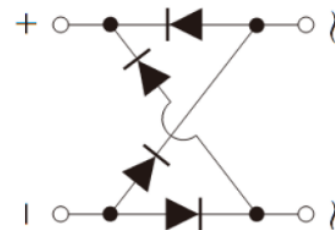


### Mechanical Data

- Case : M4 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.29 grams

### Application

- QC/PD Charger
- General Console power
- NB Adapter
- Monitor Power
- Smart Speaker Power
- Slim Adapter



Key Parameters	
Parameter	Value
$V_{RRM}$	1000V
$I_F(AV)$	3A
$I_{FSM}$	110A
$I_R$	5uA
Package	M4

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

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	1000	V
Maximum RMS Voltage		$V_{RMS}$	700	V
Maximum DC Blocking Voltage		$V_{DC}$	1000	V
Maximum Average Forward Current		$I_{F(AV)}$	3	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	$I_{FSM}$	110	A
	@ $T_A = 125\text{ }^\circ\text{C}$		80	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	$I_{FSM}$	200	A
	@ $T_A = 125\text{ }^\circ\text{C}$		150	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	50.2	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$		$C_J$	40	pF
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	30	$^\circ\text{C/W}$
		$R_{\theta JL}$	10	
		$R_{\theta Jc}$	12	
Operating Junction Temperature Range		$T_J$	-55~150	$^\circ\text{C}$
Storage Temperature Range		$T_{STG}$	-55~150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1.5\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.05	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	$\mu\text{A}$
		$V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	100	

NOTES :

1. Mounted on a FR4, 100x100x1.6mm ,2oz copper pad area.

TYPICAL CHARACTERISTIC CURVES

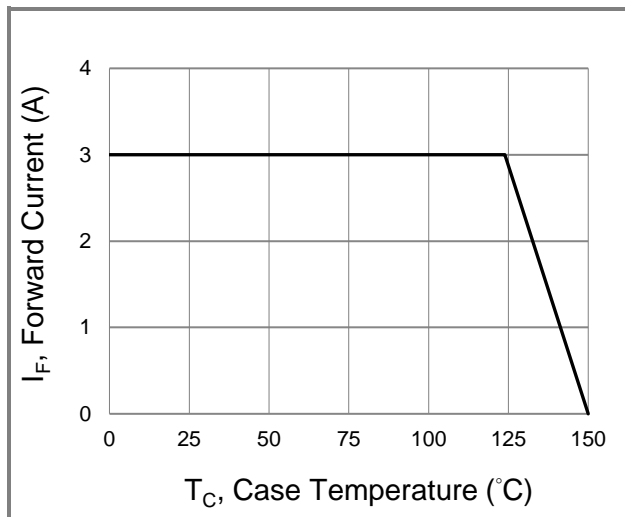


Fig.1 Forward Current Derating Curve

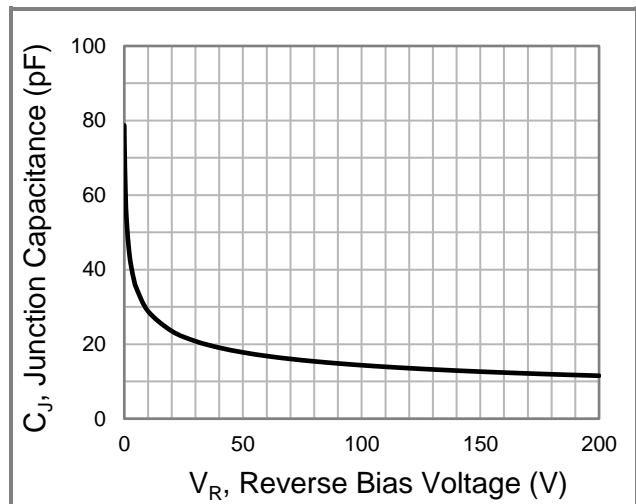


Fig.2 Typical Junction Capacitance

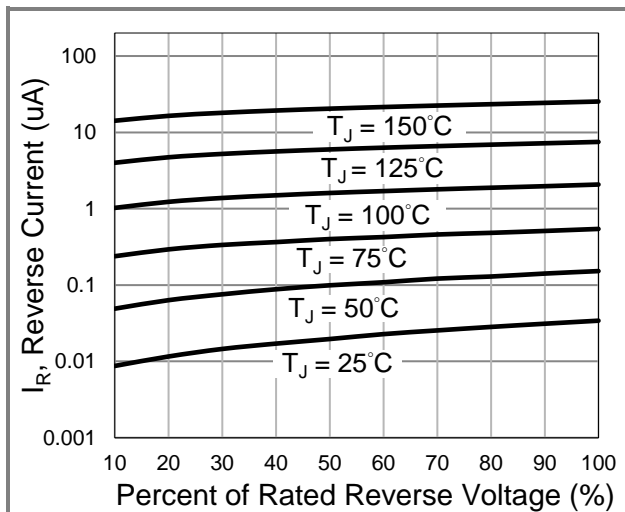


Fig.3 Typical Reverse Characteristics

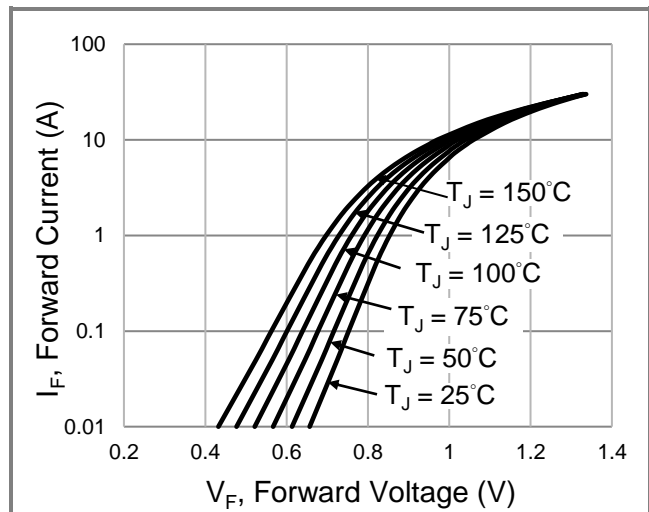


Fig.4 Typical Forward Characteristics

**Part No. Marking Code Version**

Approved Part No.	Package Type	Packing Type	Marking
PMS310	M4	3K pcs / 13" reel	PMS310

**Packaging Information & Mounting Pad Layout**

