Surface Mount Glass Passivated Fast Recovery Bridge Rectifier

Voltage	1000 V	Current	2A

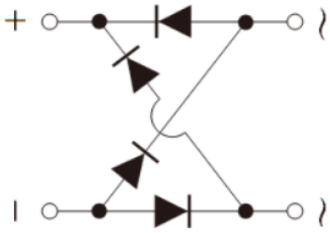
M4

Features

- Fast reverse recovery time
- Ideally suited for automatic assembly
- Save space on printed circuit boards
- Ultra thin profile package for space constrained utilization
- UL recognition file number E111753
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

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
$I_F(AV)$	2A
I_{FSM}	100A
I_R	5uA
T_{rr}	250ns
Package	M4

Maximum Ratings and Thermal Characteristics (T_A = 25 °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		$I_{F(AV)}$	2	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 °C	I_{FSM}	100	A
	@ T_A = 125 °C		80	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 °C	I_{FSM}	200	A
	@ T_A = 125 °C		160	
I^2t rating for fusing (t = 8.3ms)		I^2t	41.5	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V		C_J	30	pF
Maximum Reverse Recovery Time (Note 2)		Trr	250	ns
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	50	°C/W
		$R_{\theta JL}$	35	
		$R_{\theta JC}$	28	
Operating junction and storage temperature range		T_J, T_{STG}	-55~150	°C

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 1 A, T_J = 25 °C	-	-	1.3	V
Reverse Current	I_R	V_R = 1000 V, T_J = 25 °C	-	-	5	uA
		V_R = 1000 V, T_J = 125 °C	-	-	100	

NOTES :

1. Mounted on a FR4,100x100x1.6mm ,2oz copper pad area.
2. Measured with IF = 0.5 A, IR= 1 A, IRR = 0.25 A

TYPICAL CHARACTERISTIC CURVES

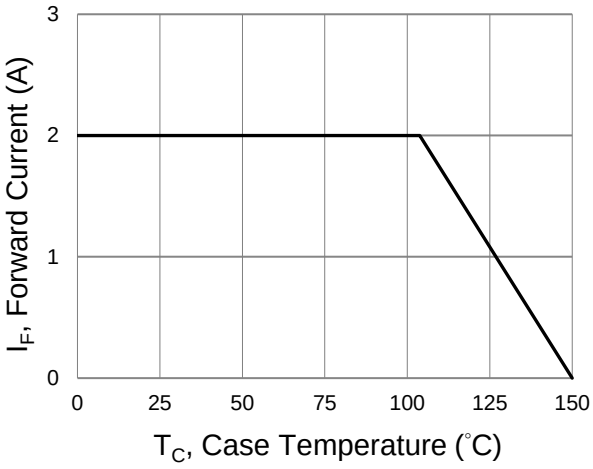


Fig.1 Forward Current Derating Curve

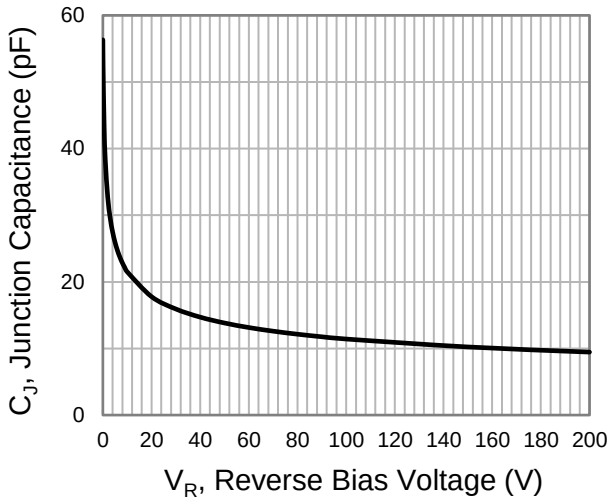


Fig.2 Typical Junction Capacitance

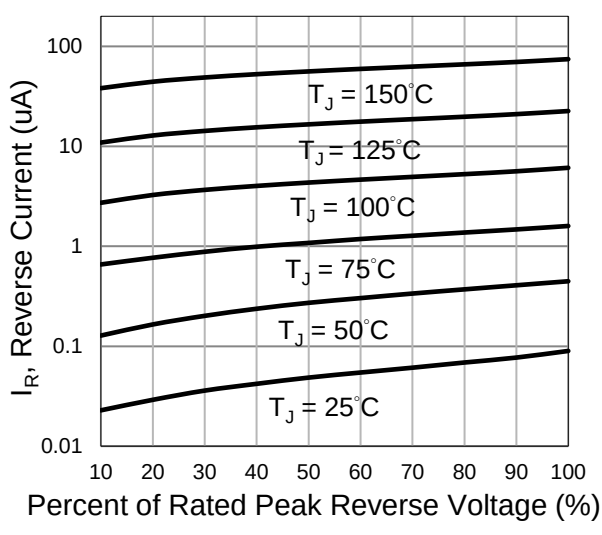


Fig.3 Typical Reverse Characteristics

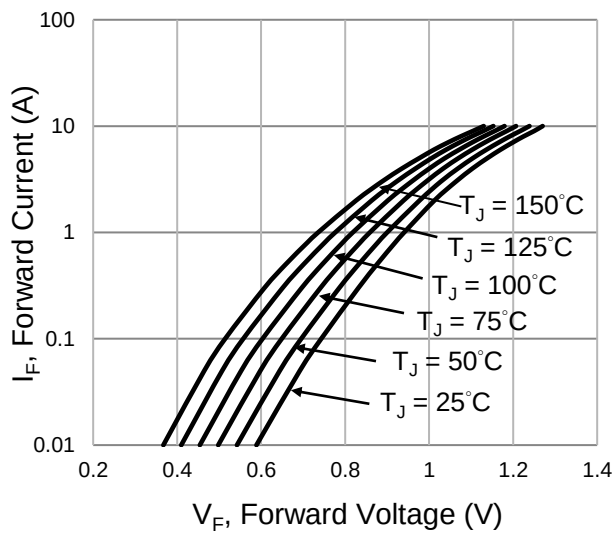


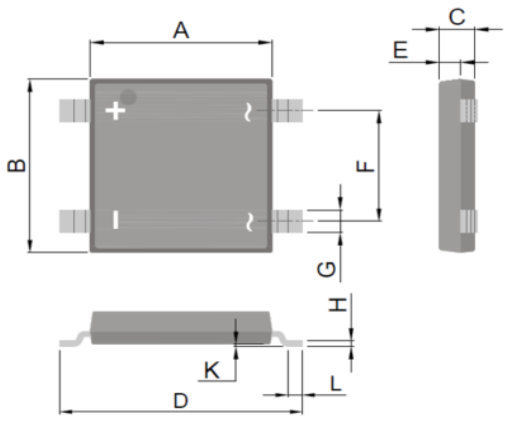
Fig.4 Typical Forward Characteristics

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
RPMS210	M4	3K pcs / 13” reel	RPMS210

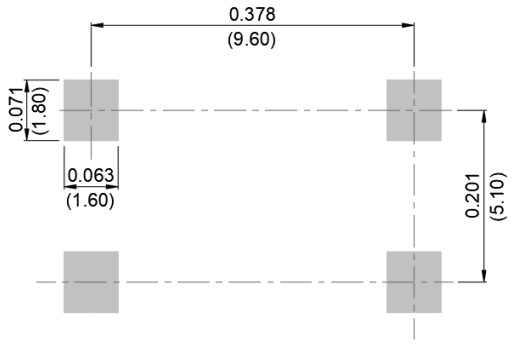
Packaging Information & Mounting Pad Layout

M4 Dimension — Unit: inch(mm)



M4 Dimension.Unit:Inch(mm)				
Dim	Unit (Inch)		Unit (mm)	
	Min	Max	Min	Max
A	0.301	0.313	7.65	7.95
B	0.309	0.321	7.85	8.15
C	0.056	0.063	1.41	1.61
D	0.402	0.417	10.20	10.60
E	0.032	0.040	0.81	1.01
F	0.197	0.205	5.00	5.20
G	0.035	0.047	0.90	1.20
H	0.006	0.014	0.15	0.35
K	0.000	0.006	0.00	0.15
L	0.022	0.041	0.55	1.05

M4 Pad Layout — Unit: inch(mm)



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