

US2AF THRU US2MF-HAF

Surface Mount Ultrafast Recovery Rectifier

Reverse Voltage – 50 to 1000 V

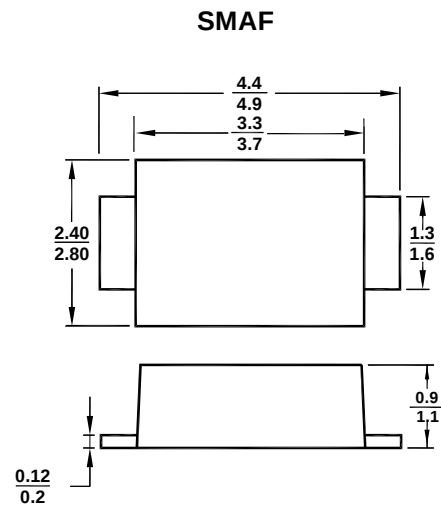
Forward Current – 2 A

Features

- Glass Passivated Chip Junction
- For surface mount applications
- Low profile package
- Easy pick and place
- Halogen and Antimony Free(HAF), RoHS compliant

Mechanical Data

- **Case:** SMAF
- **Terminals:** Solderable per MIL-STD-750, method 2026



All Dimensions in mm

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	US2AF	US2BF	US2DF	US2GF	US2JF	US2KF	US2MF	Units
	Marking	US2A	US2B	US2D	US2G	US2J	US2K	US2M	-
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I _{F(AV)}	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50							A
Maximum Forward Voltage at 2 A	V _F	1			1.3	1.65			V
Maximum DC Reverse Current T _a = 25°C at Rated DC Blocking Voltage T _a = 125°C	I _R	5 100							μA
Maximum Reverse Recovery Time at I _F = 0.5 A, I _R = 1 A, I _{rr} = 0.25 A	t _{rr}	50				75			ns
Typical Thermal Resistance ¹⁾	R _{θJA}	60							°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	- 55 to + 150							°C

¹⁾ P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

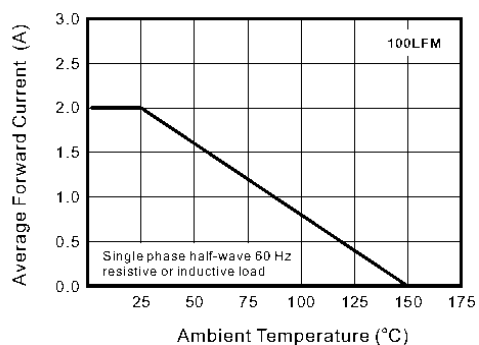
TOP DYNAMIC



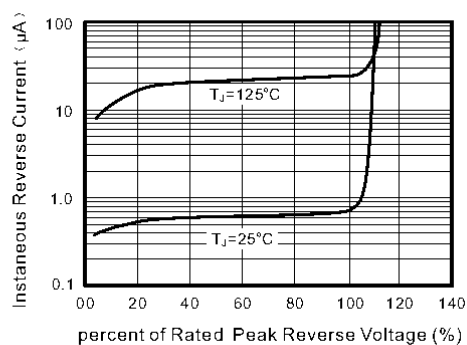
Dated: 04/07/2016 JD Rev: 02

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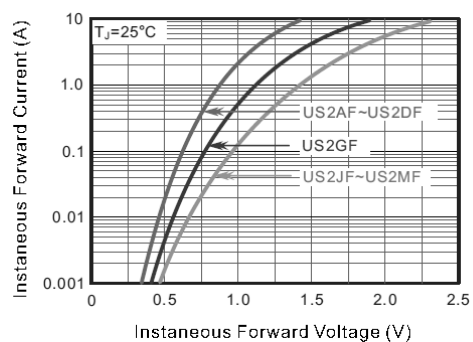
Forward Current Derating Curve



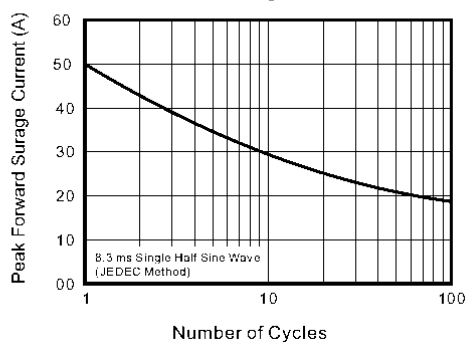
Typical Reverse Characteristics



Typical Forward Characteristics



Maximum Non-Repetitive Peak Forward Surge Current



TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007 ISO 9001 : 2008 Certificate No. 80114012 OHSAS 18001 : 2007 Certificate No. 05131506008 IECQ QC 080000 Certificate No. ECU100071002

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