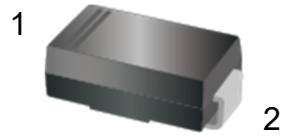
Prisemi®

PUS2x Series

Surface Mount Superfast Recovery Rectifiers

Feature

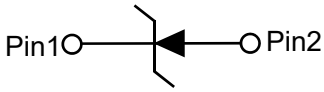
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- High efficiency
- Lead free in comply with EU RoHS 2011/65/EU directives



Top View

Mechanical Characteristics

- Package: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.055g / 0.002oz



Circuit Diagram

Absolute maximum rating@25℃

Parameter	Symbol	PUS2A	PUS2B	PUS2D	PUS2G	PUS2J	PUS2K	PUS2M	Units
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 at T_c = 125 °C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50							A
Maximum Forward Voltage at 2.0 A	V_F	1.0			1.3	1.65			V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a = 125 °C	I_R	5.0 100							μA
Maximum Reverse Recovery Time [1]	t_{rr}	50				75			ns
Typical Thermal Resistance[2]	$R_{\theta JA}$ $R_{\theta JC}$	65 20							℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150							℃

Notes:
1) Measured with I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A .
2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Typical Characteristics

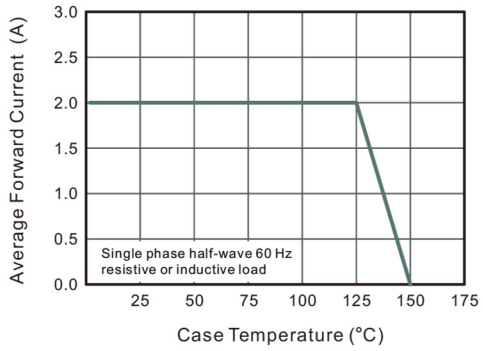


Fig.1 Forward Current Derating Curve

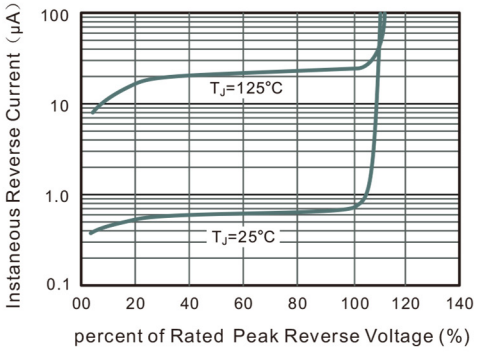


Fig.2 Typical Reverse Characteristics

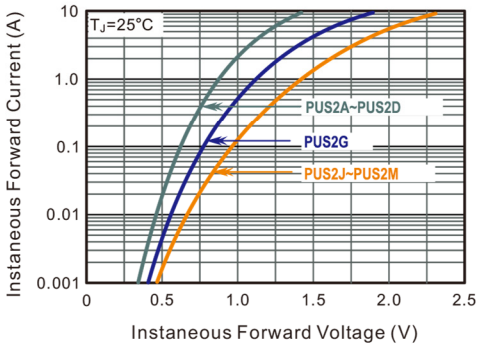


Fig.3 Typical Forward Characteristics

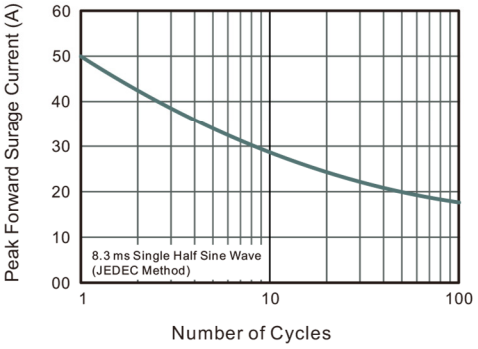
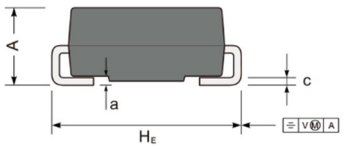
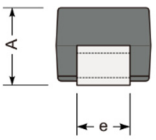


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current

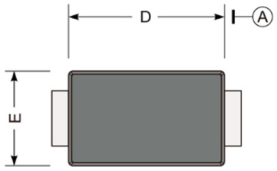
Product dimension (SMA)



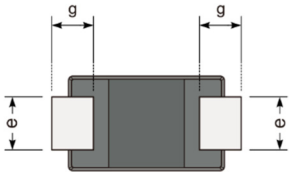
Side View



Side View

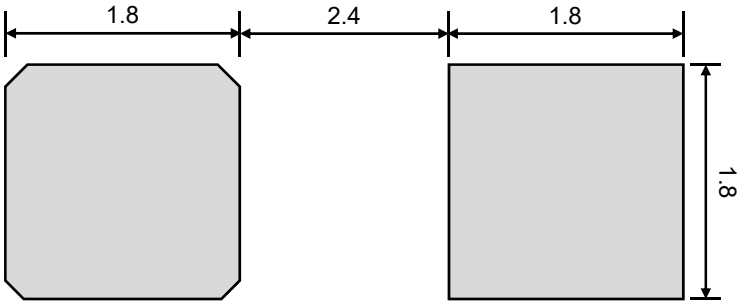


Top View



Bottom View

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	1.90	2.20	0.075	0.087
D	4.00	4.50	0.157	0.181
E	2.30	2.70	0.091	0.106
H_E	4.70	5.20	0.185	0.205
c	0.15	0.31	0.006	0.012
e	1.30	1.60	0.051	0.063
g	0.90	1.50	0.035	0.059
a	0.3		0.012	



Suggested PCB Layout

Unit:mm

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