Features

- Low profile package
- For surface mounted applications in order to optimize board space
- Glass passivated junction
- 400 Watts peak pulse power capability with a 10/1000μs waveform
- Built-in strain relief
- Excellent clamping capability
- Fast response me: typically less than 1.0ps from 0 Volts to VBR min for unidirectional types
- Low inductance

SOD-123W

Maximum Ratings and Characteristics

Ratings at 25° ambient temperature unless otherwise specified

Rating	Symbol	Value	Units
Peak pulse power dissipation at 10/1000us waveform (Note1, Note2)	P_{PP}	400	W
Operating junction	T_J	-55 to +125	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃
Typical thermal resistance junction to ambient	$R_{\theta JA}$	220	℃/W

Notes：

1. Non-repetitive current pulse.
2. Pulse Power Dissipation is 370W min,400W typical @10/1000us.

Part Number	Reverse Stand off Voltage VR	Breakdown Voltage VBR (Volts) @ IT		Test Current IT	Maximum Clamping Voltage VC @ Ipp	Maximum Peak Pulse Current Ipp	Maximum Reverse Leakage IR @ VR
UNI	(V)	MIN	MAX	(mA)	(V)	(A)	(μA)
PTVS3V3S1UR,115-JSM	3.3	4.2	6.5	10	7.3	54.8	200

Ratings and Characteristic Curves (T_A =25°C unless otherwise noted)

Figure 1. TVS Transients Clamping Waveform

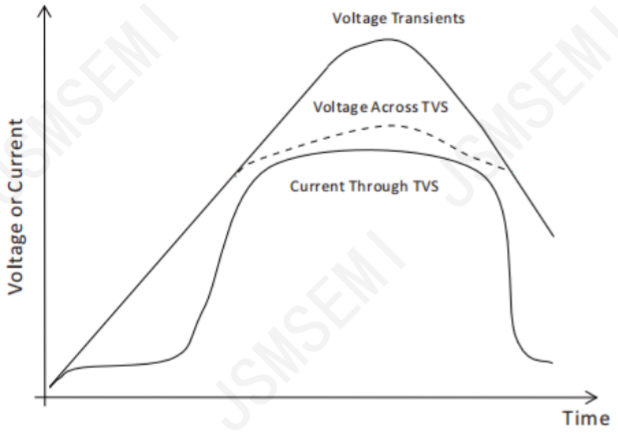


Figure 2. Peak Pulse Power Rang Curve

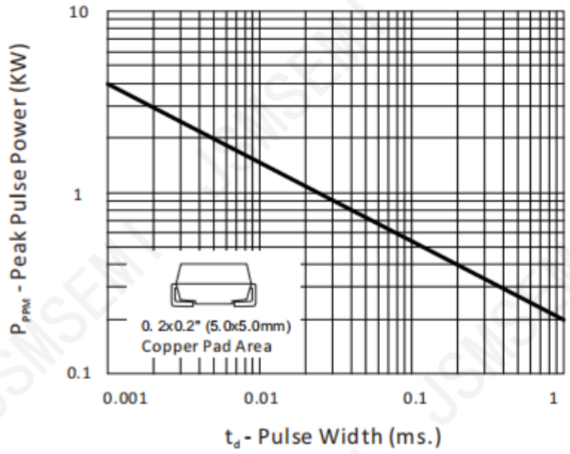


Figure 3. Pulse Derating Curve

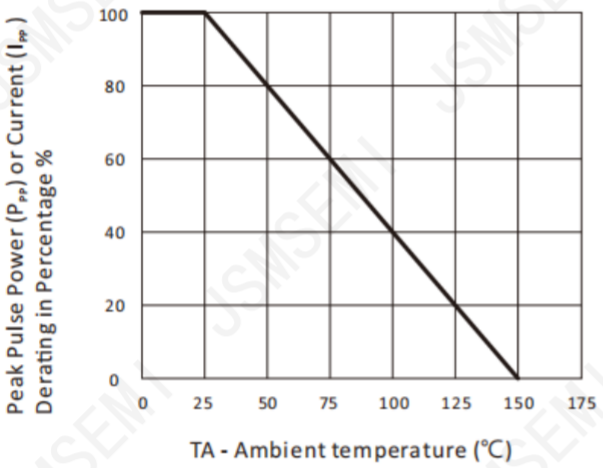


Figure 4. Pulse Waveform

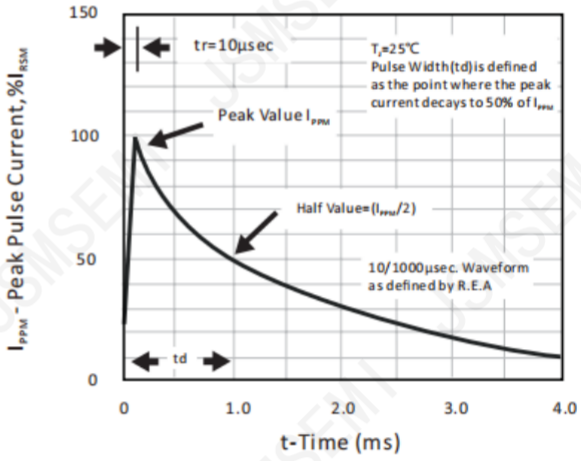
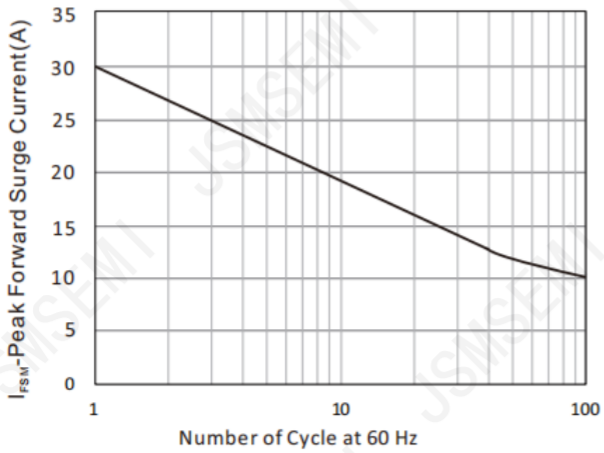
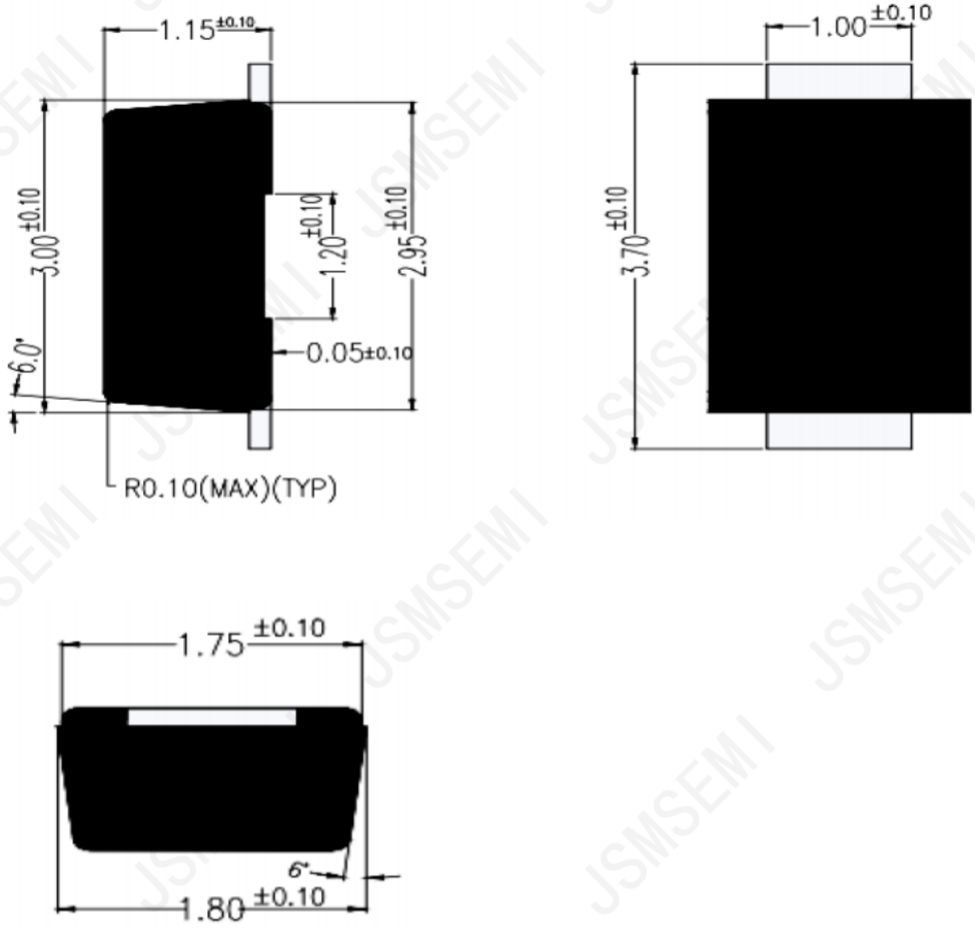


Figure 5. Maximum Non-Repetive Peak Forward Surge Current Uni-Directional Only



Dimension (SOD-123W)



Unit: inch(mm)

Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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