Features

- For surface mounted applications in order to optimize board space.
- Low profile package.
- Excellent clamping capablity.
- IEC61000-4-2ESD 30kV Air, 30kV contact compliance
- Protects one I/O line
- Lead-free parts meet RoHS requirments.
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case:Molded plastic,SOD-123
- Terminals:Plated terminals,solderable per MIL-STD-750, Method 2026
- olarity:Indicated by cathode band
- ounting Position:Any

Applications

- Personal digital assistants(PDA)
- Cellular handsets&Accessories
- Portable devices
- Portable instrumentation
- Handhelds and notebooks
- Digital cameras

Maximum ratings and Electrical Characteristics(AT T_A=25°℃ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	Value	UNIT
Peak Power Dissipation	Peak Pulse Power Dissipation atTA=25℃ by 10×1000us(Note 1)	P_{PPM}	400	W
Operating junction temperature range		Tj	-55 to +150	℃
Storage temperature range		T_{STG}	-55 to+150	℃

Note:1.Non-repetitive current pulse,per Fig.2 and derated above TA=25℃ per Fig.1

Electrical Characteristics(T_A=25℃ unless otherwise noted)

Part Number	Breakdown Voltage VBR@IT			Maximum Reverse Leakage IR@VRWM (μA)	Working Peak Reverse Voltage VRwm(V)	Maximum Reverse Surge Current Ipp(2)(A)	Maximum Clamping Voltage Vc@Ipp(V)
(Uni)	Min(V)	Max(V)	-(1)(mA)				
PTVS5V0S1UR,115-JSM	6.40	7.00	10	500	5.0	43.6	9.2

Rating and characteristic curves

FIG.1 - PULSE DERATING CURVE

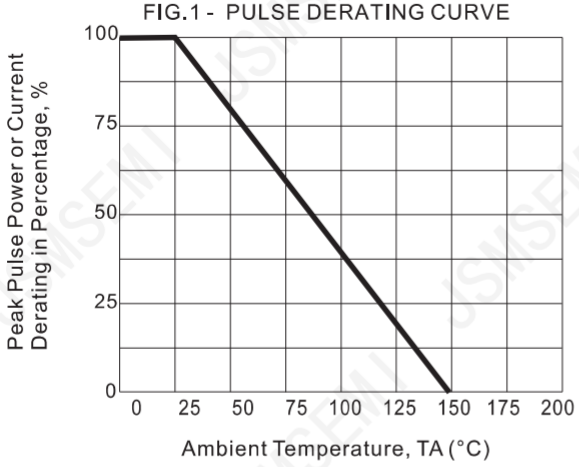


FIG.2 - 10X1000us PULSE WAVEFORM

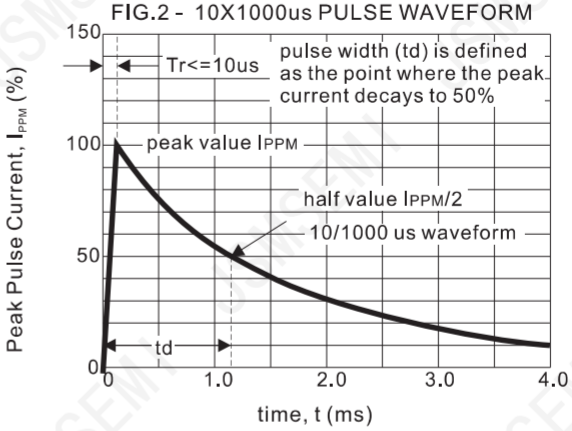


FIG.3 - 8X20us PULSE WAVEFORM

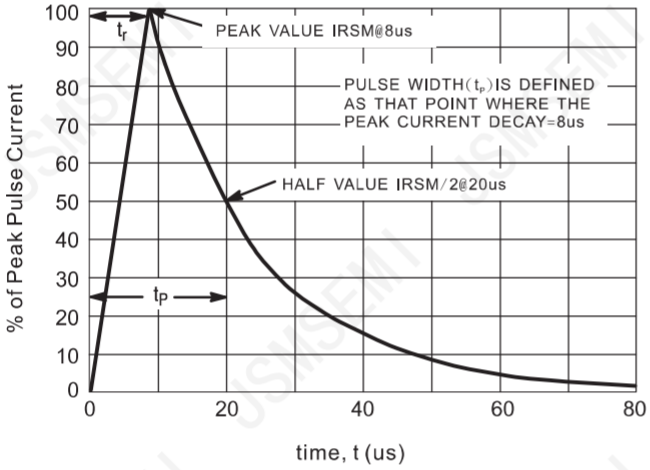


FIG.4 - PEALK PULSE POWER RATING CURVE

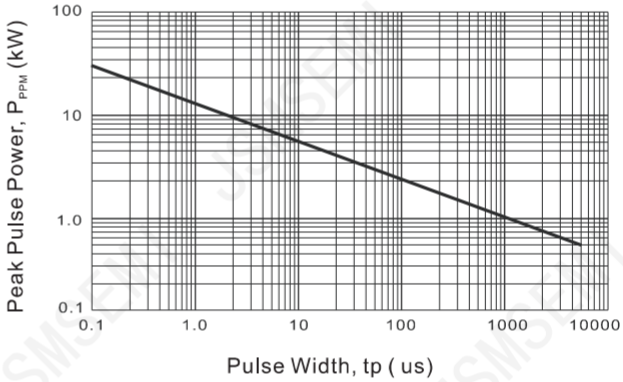
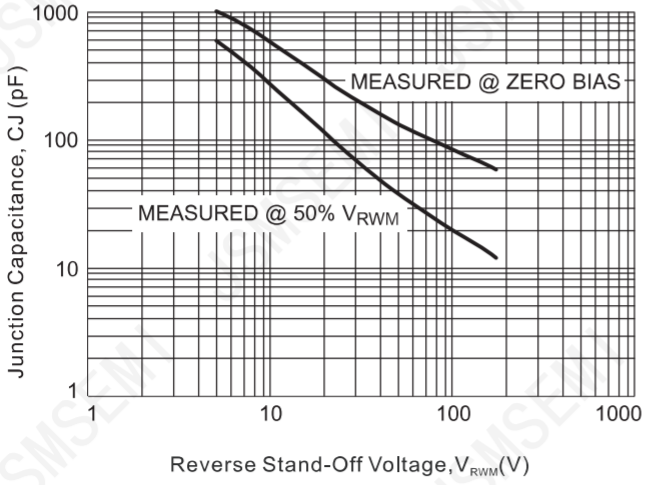
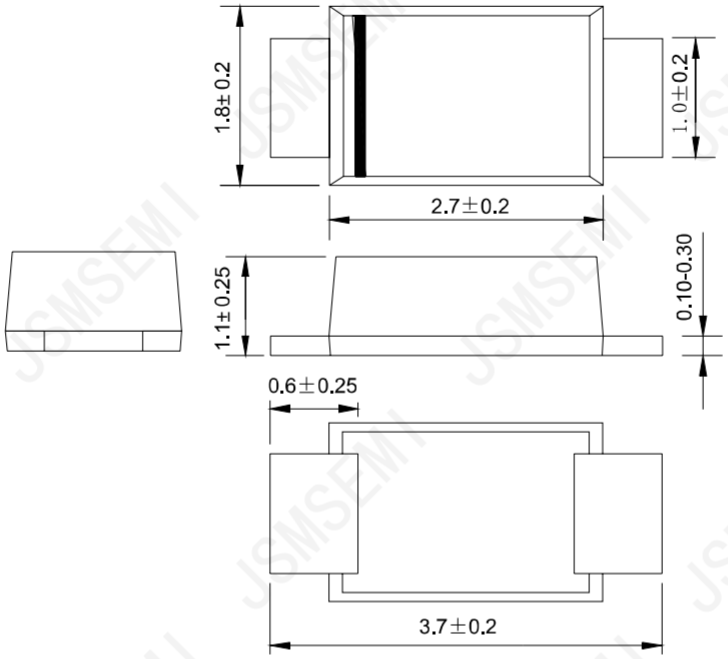


FIG.5 - TYPICAL JUNCTION CAPACITANCE

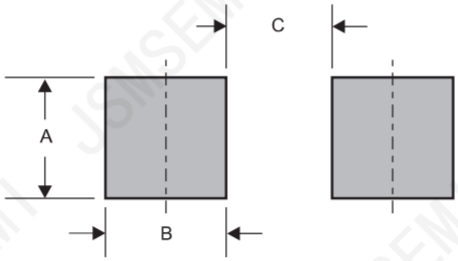


Package outline

SOD-123



Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.044 (1.10)	0.040 (1.00)	0.079 (2.00)

Revision History

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

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