

Transient Voltage Suppressor power 200 w

Stand-Off Voltage: 3.3V

FEATURES

- ♦Excellent clamping capability
- ♦Low leakage current
- ♦High surge capability
- ♦Glass passivated chip
- ♦Epoxy resin package
- ♦Built-in strain relief
- ♦Will not fatigue
- ♦RoHS Compliant
- ♦Fast response time: typically less than 1.0ps from 0 Volts to VBR min

APPLICATIONS

- ♦Cellular phones
- ♦Portable devices
- ♦Business machines
- ♦Power supplies
- ♦Consumer applications

MECHANICAL DATA

- ♦Case: SOD-123FL
- ♦Terminals: Solderable per MIL-STD-750, Method 2026
- ♦Approx. Weight: 15mg /0.00048oz

Absolute Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation(Note1)(Note2)	P _{PPM}	200	W
Steady State Power Dissipation(Note3)	P _D	1	W
Peak Forward Surge Current(Note4)	I _{FSM}	20	A
Maximum Instantaneous Forward Voltage at 10A	V _{FM}	3.5	V
Typical Thermal Resistance Junction to Lead	R _{θJL}	100	°C/W
Typical Thermal Resistance Junction to Ambient	R _{θJA}	220	°C/W
Operating Junction and Storage Range	T _J , T _{STG}	-55 to +150	°C

NOTES

Notes1: Non-repetitive current pulse , 10/1000us Waveform.

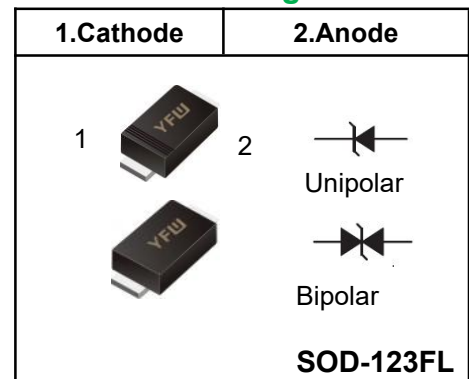
Notes2: Mounted on copper pad area of 3×3mm to each terminal.

Notes3: Infinite HeatSink at T_L =50°C

Notes4: Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4 perminute maximum.

Notes5: For UnidirectionalOnly.

Pinning



Part Number		Device Marking Code		Reverse Stand-off Voltage	Breakdown Voltage VBR @ IT		Test Current	Max. Clamping Voltage @ IPP	Max. Peak Pulse Current	Max. Reverse Leakage @ VRWM
UNI-POLAR	BI-POLAR	UNI	BI	VRWM (V)	Min. (V)	Max. (V)	IT (mA)	VC MAX. (V)	IPP (A)	IR (uA)
SMF3.3A	SMF3.3CA	HZ	GZ	3.3	5.2	6.0	10	7.3	27.40	200

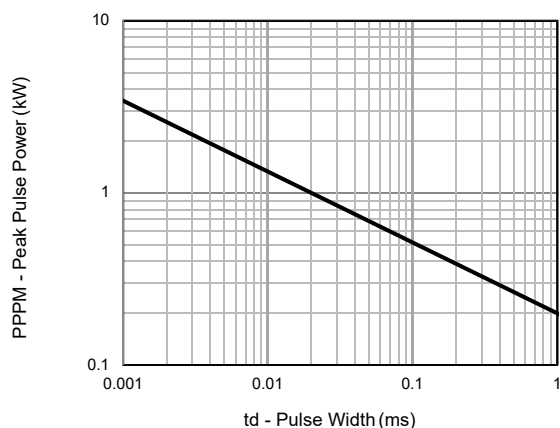


Fig.1 - Peak Pulse Power Rating

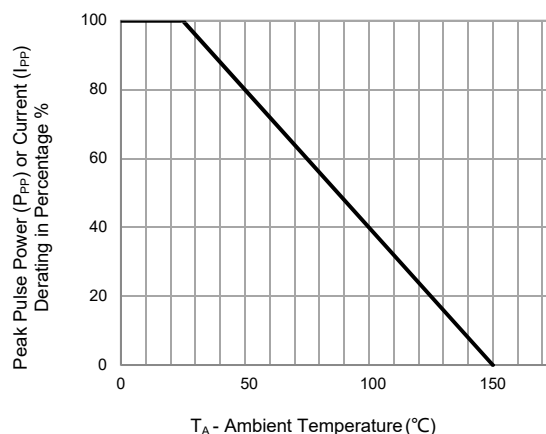


Fig.2 - Pulse Derating Curve

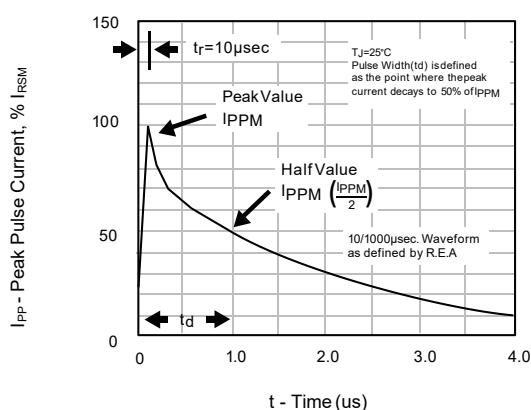


Fig.3 - Pulse Waveform

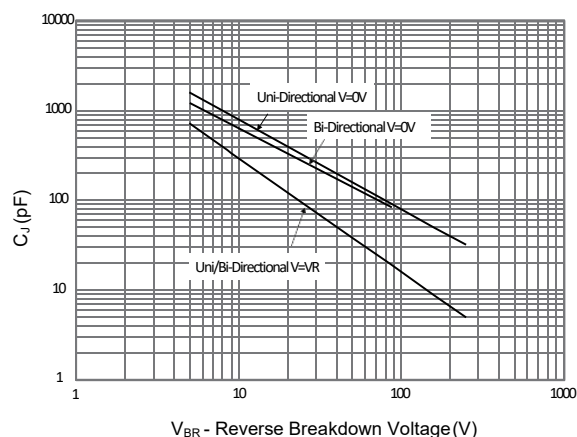


Fig.4 - Typical Junction Capacitance

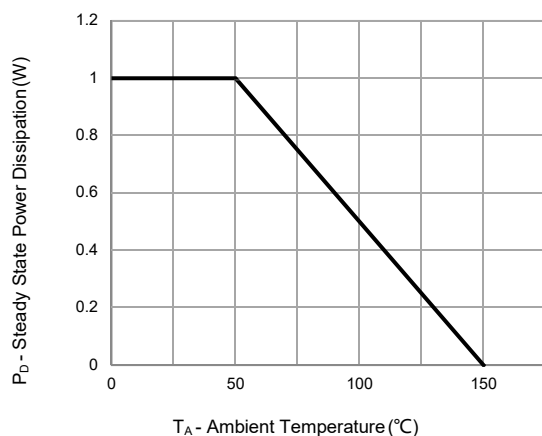


Fig.5 - Steady State Power Dissipation Derating Curve

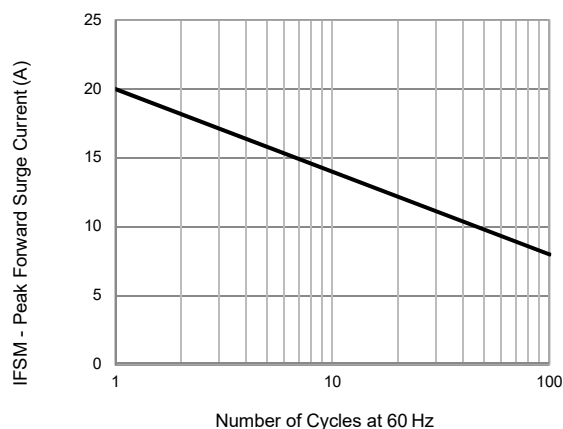
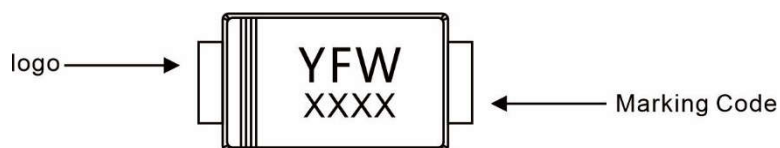


Fig.6 - Maximum Non-Repetitive Peak Forward Surge Current
Uni-Directional Only

Marking Diagram



Ordering information

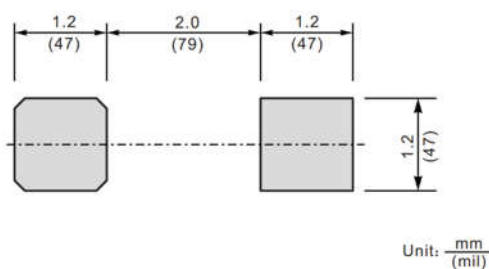
Package	Packing Description	Packing Quantity
SOD-123FL	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-123FL

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.3	35	43
C	0.12	0.20	4.7	7.9
D	2.6	2.9	102	114
E	1.7	1.9	67	75
e	0.8	1.1	31	43
g	0.7	0.9	28	35
HE	3.5	3.8	138	150
∠	7°			

The recommended mounting pad size



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