



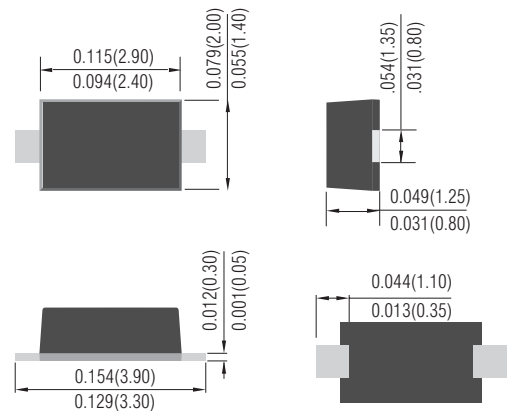
Surface Mount Transient Voltage Suppressor 400W Peak Power Pulse Voltage 20V



FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- For surface mounted applications
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request
- AEC-Q101 qualified

SOD-123S Unit:inch(mm)



MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

RATING	SYMBOL	VALUE	UNITS
Peak Power Dissipation on 10/1000us waveform (Note 1.2, Fig.1)	P _{pp}	400	W
Peak Forward Surge Current, 8.3ms single half sine - wave superimposed on rated load For (JEDEC method) (Notes 2.3)	I _{FSM}	40	A
Peak Pulse Current on 10/1000us waveform (Note1, Fig.3)	I _{pp}	See next page	A
Operating and Storage Temperature Range	T _J , T _{STG}	-55 ~ +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above TA = 25°C per Fig.2.
2. Mounted on 5.0 mm²(0.13mm thick) land areas.
3. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

DEVICE CHARACTERISTICS

P4SMSJ20A-A

Part Number	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Package
		$V_{BR} @ I_T$						SOD-123S
		V_{RWM}	Min.					Max.
UNI	V	V	V	mA	$I_R @ V_{RWM}$ UNI	V	A	UNI
400W Transient Voltage Suppressor								
P4SMSJ20A	20.0	22.20	24.50	1	5	32.4	12.3	4IV

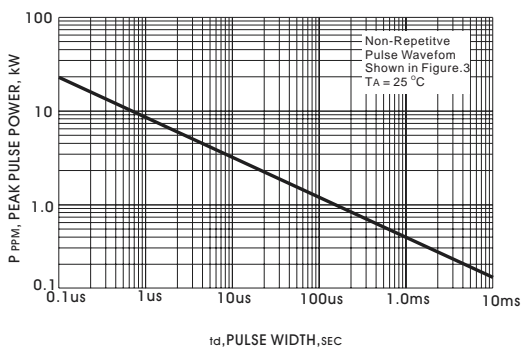


Fig.1 PEAK PULSE POWER RATING CURVE

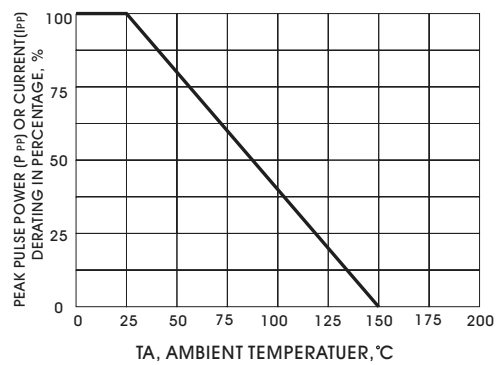


Fig.2 DERATING CURVE

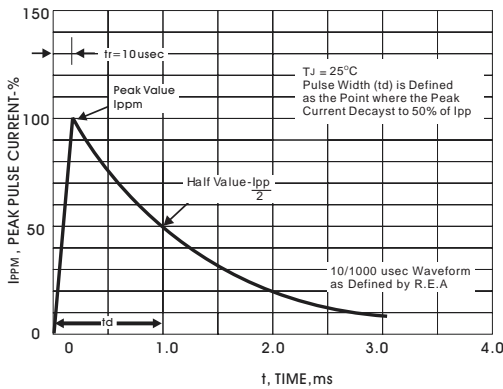


Fig.3 PULSE WAVE FORM

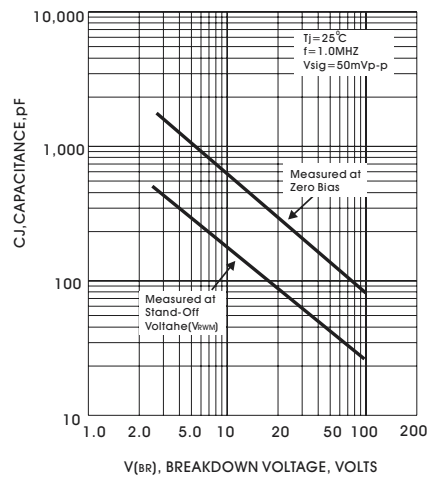


Fig.4 TYPICAL CAPACITANCE

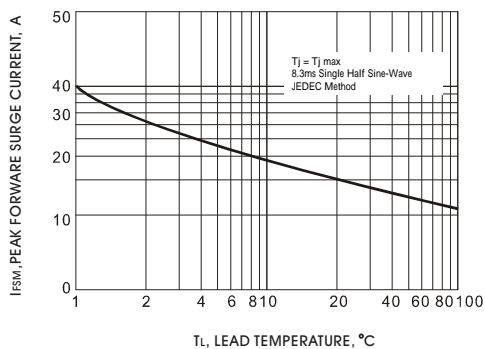
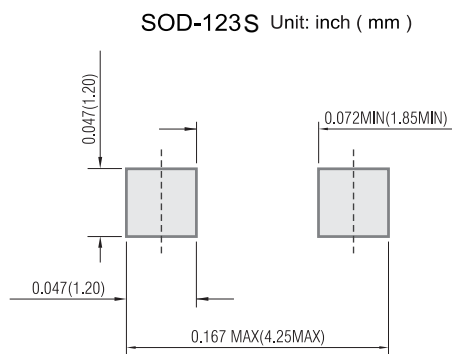


Fig.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

DEVICE CHARACTERISTICS

P4SMSJ20A-A

MOUNTING PAD LAYOUT



MARKING INFORMATION

