CHENMKO ENTERPRISE CO.,LTD

STVJ7.0AGP-A

GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

VOLTAGE-7 VOLTS

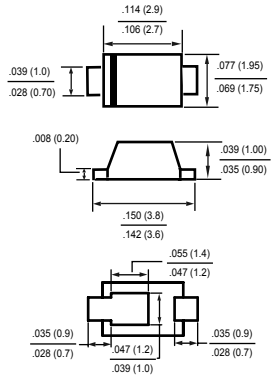
225 WATTS PEAK POWER 1.0 WATT STEADY STATE

Halogens free devices

FEATURES

* Plastic package
* 225W surge capability at 1ms
* Glass passivated chip junction in SOD-123J Package
* Excellent clamping capability
* Low Zener Impedance
* Fast response time: typically less than 1.0ps from 0 volts to BV min.
* Typical IR less than 1 uA above 10V
* High temperature soldering guaranteed : 260°C/10 seconds at terminals

SOD-123J



Dimensions in inches and (millimeters)

SOD-123J

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

DEVICES FOR BIDIRECTIONAL APPLICATIONS

For Bidirectional use C or CA Suffix for types STVJ5.0AGP-A thru types STVJ51AGP-A
Electrical characteristics apply in both directions.

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Peak Power Dissipation at T_A = 25°C, Tp = 1ms (Note1)	P_{PK}	Minimum 225	Watts
Steady State Power Dissipation at T_L = 25°C	P_D	1.0	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Note 2)	I_{FSM}	50	Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	°C

NOTES : 1. Non-repetitive current pulse, per Fig. 3 and derated above T_A = 25°C per Fig. 2.
2. 8.3ms single half sine-wave, duty cycle = 4 pulses per minute maximum.
3. PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area

2008-07

ELECTRICAL CHARACTERISTICS (STVJ7.0AGP-A)

TYPE	Zener Voltage VZ (V) @ IZT			Test current	Working Peak Reverse Voltage	Maximum Reverse Leakage Current	Maximum Reverse Current	Maximum reverse Voltage @IRSM
	Min	Nom	Max					
	Volts	Volts	Volts	IZT(mA)	Vrwm(V)	IR(uA)	Irsm(A)	Vrsm(V)
STVJ7.0AGP-A	7.78		8.6	10	7	100	12	18.8

RATING CHARACTERISTIC CURVES (STVJ7.0AGP-A)

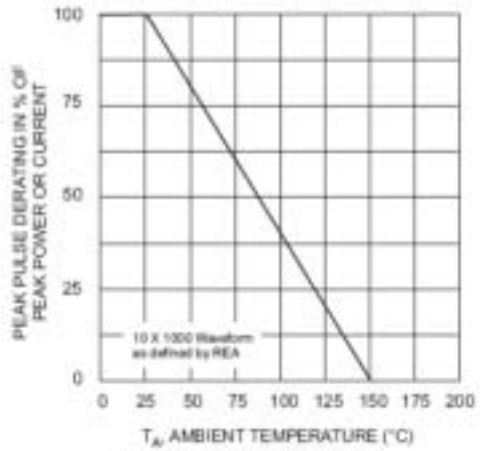


Fig1. Pulse Derating Curve

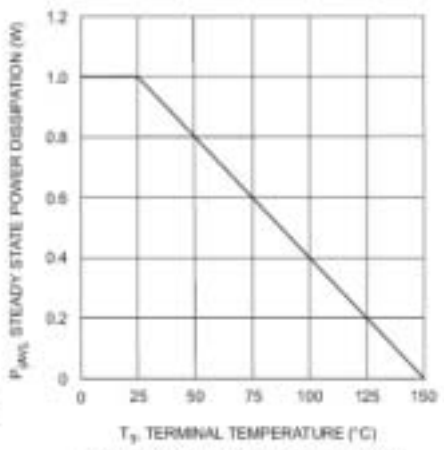


Fig2. Steage State Power Derating

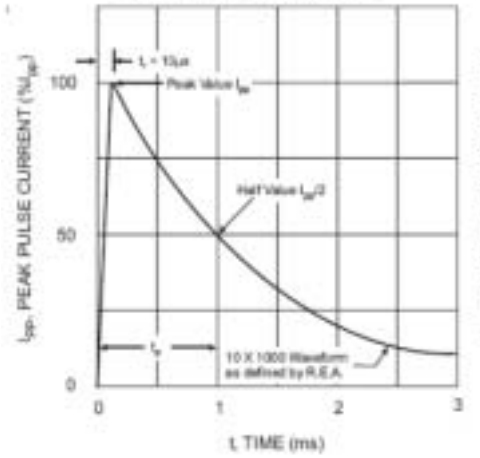


Fig3. Pulse Waveform

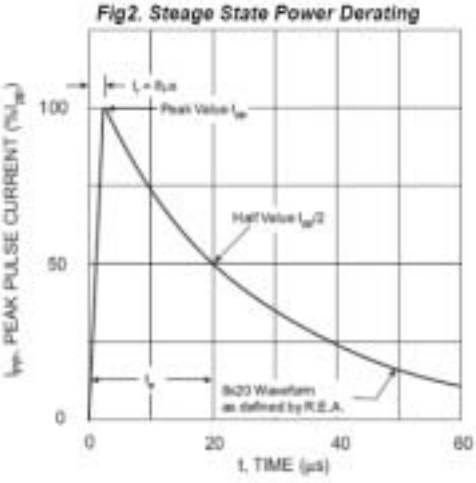


Fig4. Pulse Waveform

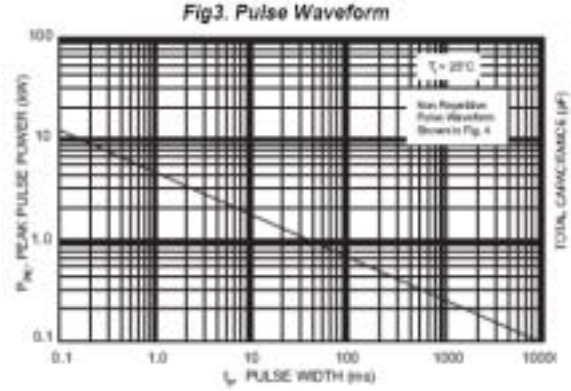


Fig5. Pulse Rating Curve

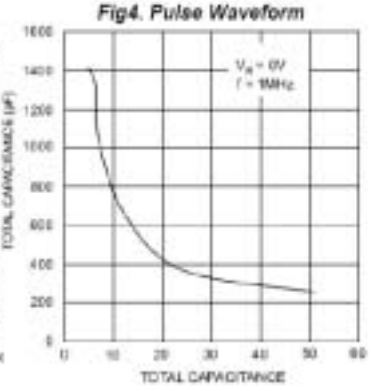


Fig6. V_{RWM}(V)