



# CHENMKO ENTERPRISE CO.,LTD

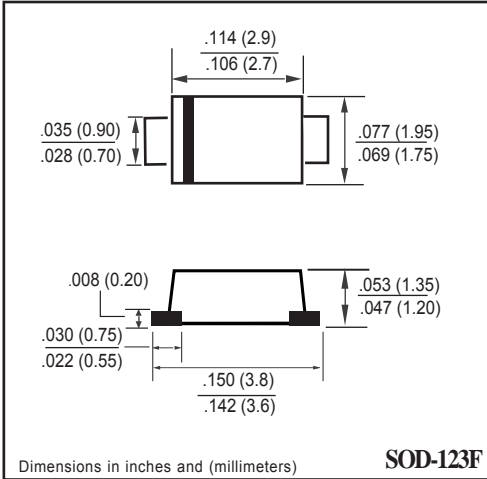
**TVSF33AGP-A**

**GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR**  
**VOLTAGE- 33 VOLTS**  
**200 WATTS PEAK POWER 1.0 WATT STEADY STATE**

*Halogens free devices*

## FEATURES

- \* Plastic package
- \* 200W surge on 10/1000 uS waveform
- \* Glass passivated chip junction in SOD-123F Package
- \* Excellent clamping capability
- \* Low Zener Impedance
- \* Hightemperaturesolderingguaranteed:  
260oC/10secondsatterminals



## 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 TVSF5.0AGP thru types TVSF190AGP  
 Electrical characteristics apply in both directions.

## MAXIMUM RATINGS ( At Ta = 25°C unless otherwise noted )

RATINGS	SYMBOL	VALUE	UNITS
Peak Power Dissipation On 10/1000 uS Waveform	PPK	Minimum 200	Watts
Steady State Power Dissipation at TL = 75°C	Pd	1.0	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	20	Amps
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150	°C

## ELECTRICAL CHARACTERISTICS ( TVSF33AGP-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	IZT(mA)				
	Volts	Volts	Volts		Vrwm(V)	IR(uA)	Irsm(A)	Vrsm(V)
TVSF33AGP-A	36.7		40.6	1.0	33	5.0	3.75	53.3

## RATING CHARACTERISTIC CURVES ( TVSF33AGP-A )

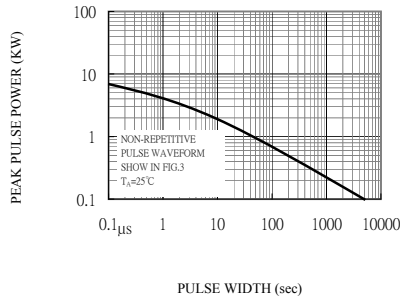


FIG. 1 - PEAK PULSE POWER RATING CURVE

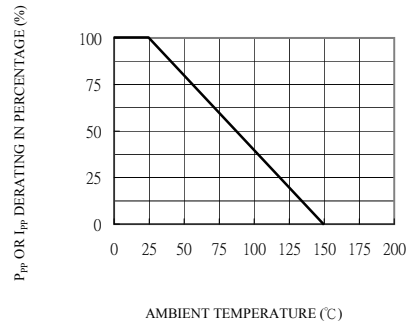


FIG. 2 - PULSE DERATING CURVE

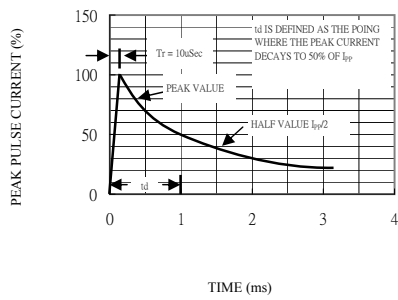


FIG. 3 - PULSE WAVEFORM

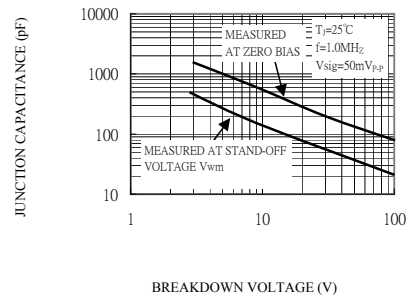


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



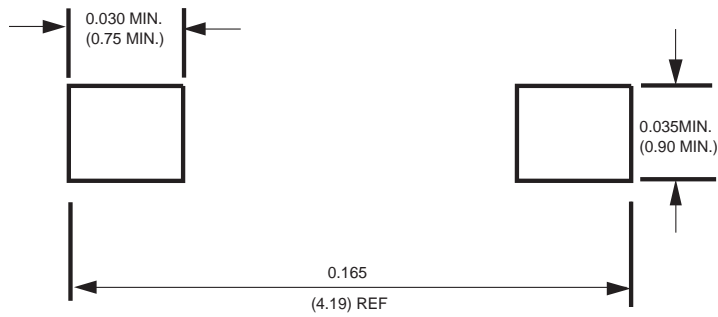
**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT**  
**RECOMMENDED FOOT PRINT**

**SOD-123F**

**SOD-123F**

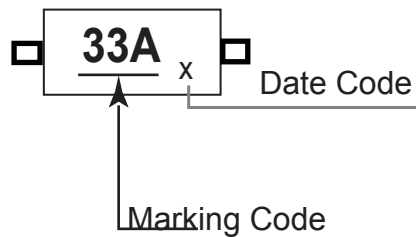
**Mounting Pad Layout**



Dimensions in inches and (millimeters)

# The Marking and Part No. for TVSF33AGP-A (SOD-123F)

Marking:



## Date Code Standard

Date Code	A	B	C	D	E	F	G	H	J	K	L	M
2015Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

Date Code	N	P	Q	R	S	T	U	V	W	X	Y	Z
2014Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

CUSTOMER :	APPROVED :	<b>CHENMKO LTD.</b>
APPROVED :	CHECKED :	
CHECKED :	DRAWN :	DRAWING No. :