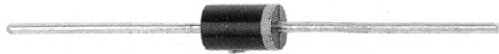


# 1.5KE SERIES

## GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

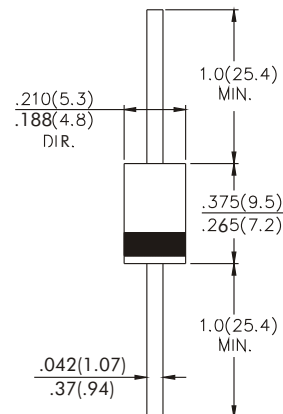


**CHENG-YI  
ELECTRONIC**



VOLTAGE 6.8 to 440 VOLTS  
1500 WATT PEAK POWER  
5.0 WATTS STEADY STATE

### DO-201AE



### FEATURES

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Glass passivated chip junction in Molded Plastic package
- 1500W surge capability at 1 ms
- Excellent clamping capability
- Low zener impedance
- Fast response time: typically less than 1.0 ps from 0 volts to BV min.
- Typical IR less than 1  $\mu$ A above 10V
- High temperature soldering guaranteed:  
260°C/10 seconds /.375", (9.5mm)  
lead length/51bs., (2.3kg) tension

### MECHANICAL DATA

- Case: JEDEC DO-201AE Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode except Bipolar
- Mounting Position: Any
- Weight: 0.045 ounce, 1.2 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATINGS	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation at TA=25°C, TP=1ms (NOTE 1)	P <sub>PK</sub>	Minimum 15000	Watts
Steady Power Dissipation at TL=75°C Lead Lengths .375", (9.5mm) (NOTE 2)	P <sub>D</sub>	5.0	Watts
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (NOTE 3)	I <sub>FSM</sub>	200	Amps
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to + 175	°C

- Notes: 1. Non-repetitive current pulse, per Fig.3 and derated above TA=25°C per Fig.2  
2. Mounted on Copper Leaf area of 0.79 in (40mm<sup>2</sup>)  
3. 8.3ms single half sine-wave, duty cycle=4 pulses minutes maximum.

# 1.5KE SERIES

## GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR



**CHENG-YI  
ELECTRONIC**

### RATING AND CHARACTERISTICS CURVES 1.5KE SERIES

Fig. 1 - PEAK PULSE POWER RATING CURVE

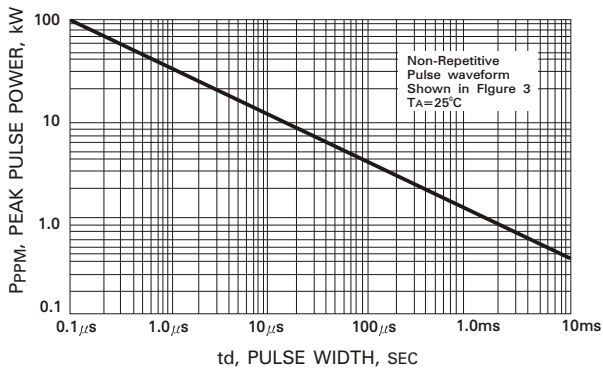


Fig. 2 - PULSE DERATING CURVE

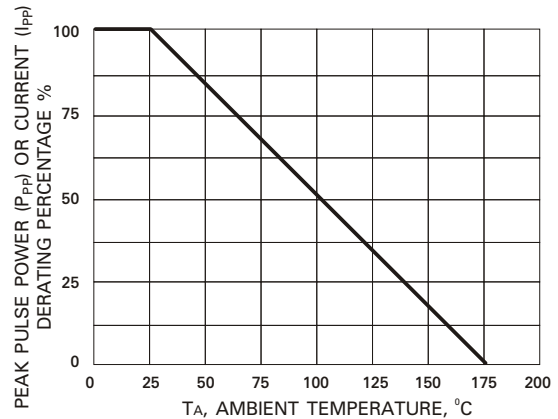


Fig. 3 - PULSE WAVEFORM

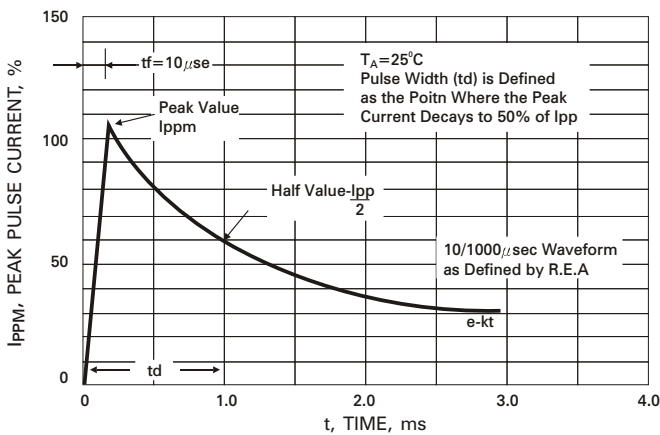


Fig. 4 - TYPICAL CAPACITANCE VS STAND-OFF VOLTAGE

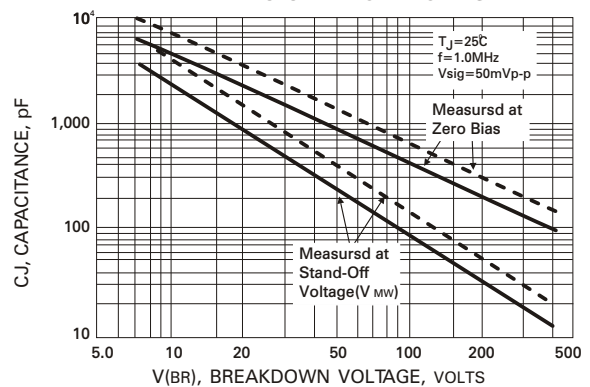


Fig. 5 - STEADY STATE POWER DERATING CURVE

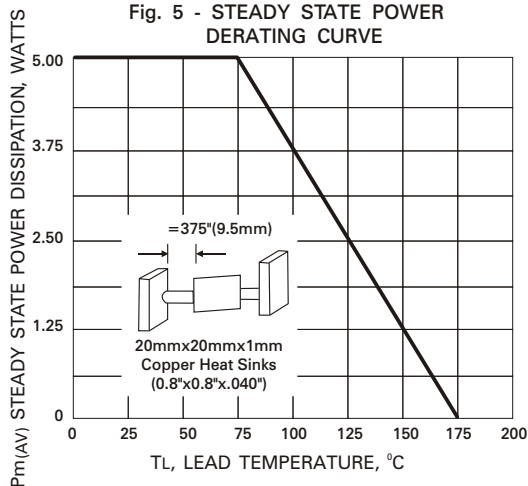


Fig. 6 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

