1.5KE6.8—1.5KE600A

TRANSIENT VOLTAGE SUPPRESSOR

BREAKDOWN VOLTAGE: 6.8 --- 600 V

PEAK PULSE POWER: 1500 W

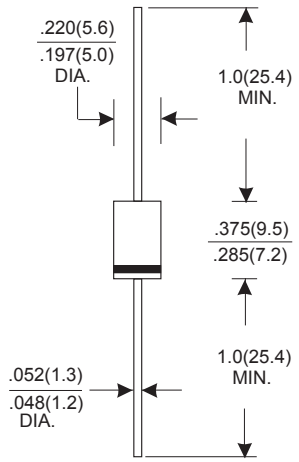
FEATURES

- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated junction
- 1500W peak pulse power capability with a 10/1000 μs waveform, repetition rate (duty cycle): 0.01%
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time: typically less than 1.0ps from 0 Volts to $V_{(BR)}$ for uni-directional and 5.0ns for bi-directional types
- For devices with $V_{(BR)}$ 10V, I_D are typically less than 5.0 μA
- High temperature soldering guaranteed:265 / 10 seconds

MECHANICAL DATA

- Case style:DO-27 molded plastic
- Polarity:color band denotes positive end (cathode) except for bidirectional
- Mounting position:any

DO-27



Dimensions in inches and (millimeters)

DEVICES FOR BIDIRECTIONAL APPLICATIONS

For bidirectional use C or CA suffix for types 1.5KE6.8 thru 1.5KE540(e.g. 1.5KE6.8C,1.5KE440CA)

Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Units
Peak Pulse Power Dissipation on 10/1000 us Waveform (Note 1, FIG.1)	PPPM	Min 1500	W
Power Dissipation on Infinite Heat Sink at TL=75° C	PD	6.5	W
Peak Pulse Current of on 10/1000us Waveform (Note 1, FIG.3)	I_{PPM}	See Table 1	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave (Note 2)	I_{FSM}	200	A
Operating Junction Temperature Range	T_J	-50 to 150	℃
Storage Temperature Range	T_{STG}	- 50 to 150	℃

Notes:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A=25°C per Fig.2.
2. Measured on 8.3ms single half sine-wave, or equivalent square wave, for Unidirectional device only.

RATINGS AND CHARACTERISTIC CURVES

Electrical Specification (T_A=25@25°C unless otherwise specified)

FIG.1 -- PEAK PULSE POWER RATING CURVE

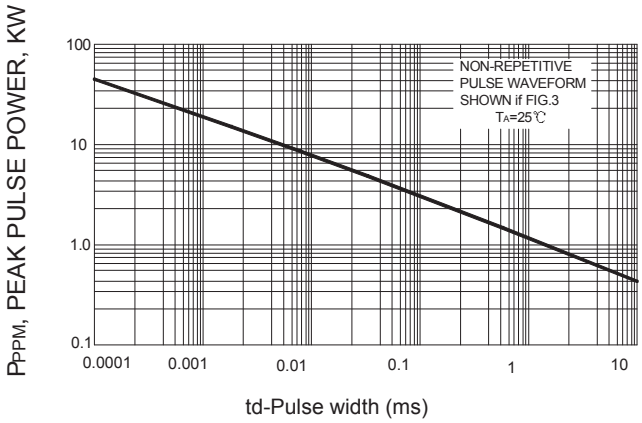


FIG.2 -- PULSE DERATING CURVE

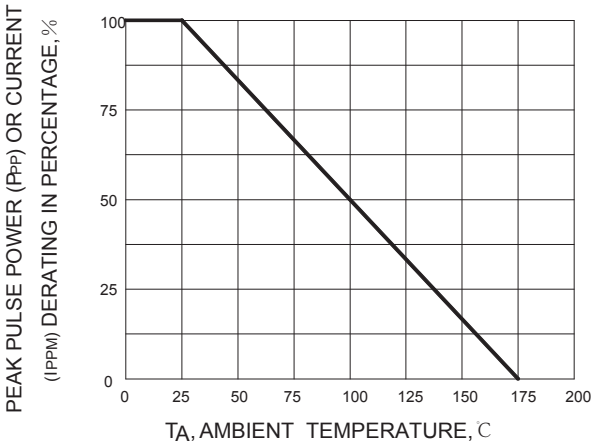


FIG.3 -- PULSE WAVEFOR

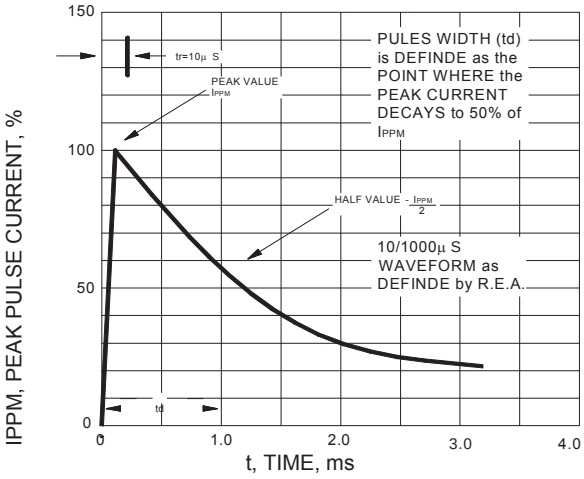


FIG.4 -- TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL