

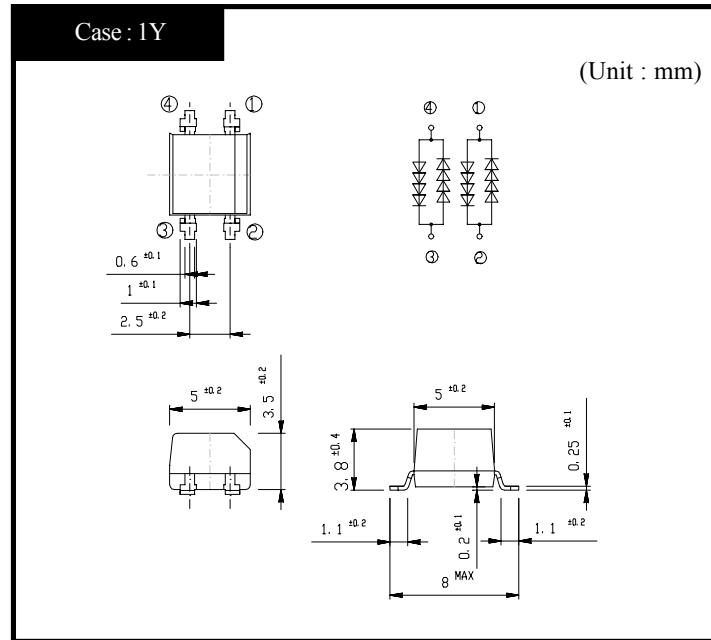
# SHINDENGEN

## Varistor

SMD

**VRYA6**

### OUTLINE DIMENSIONS



(Unit : mm)

### RATINGS

#### ● Absolute Maximum Ratings

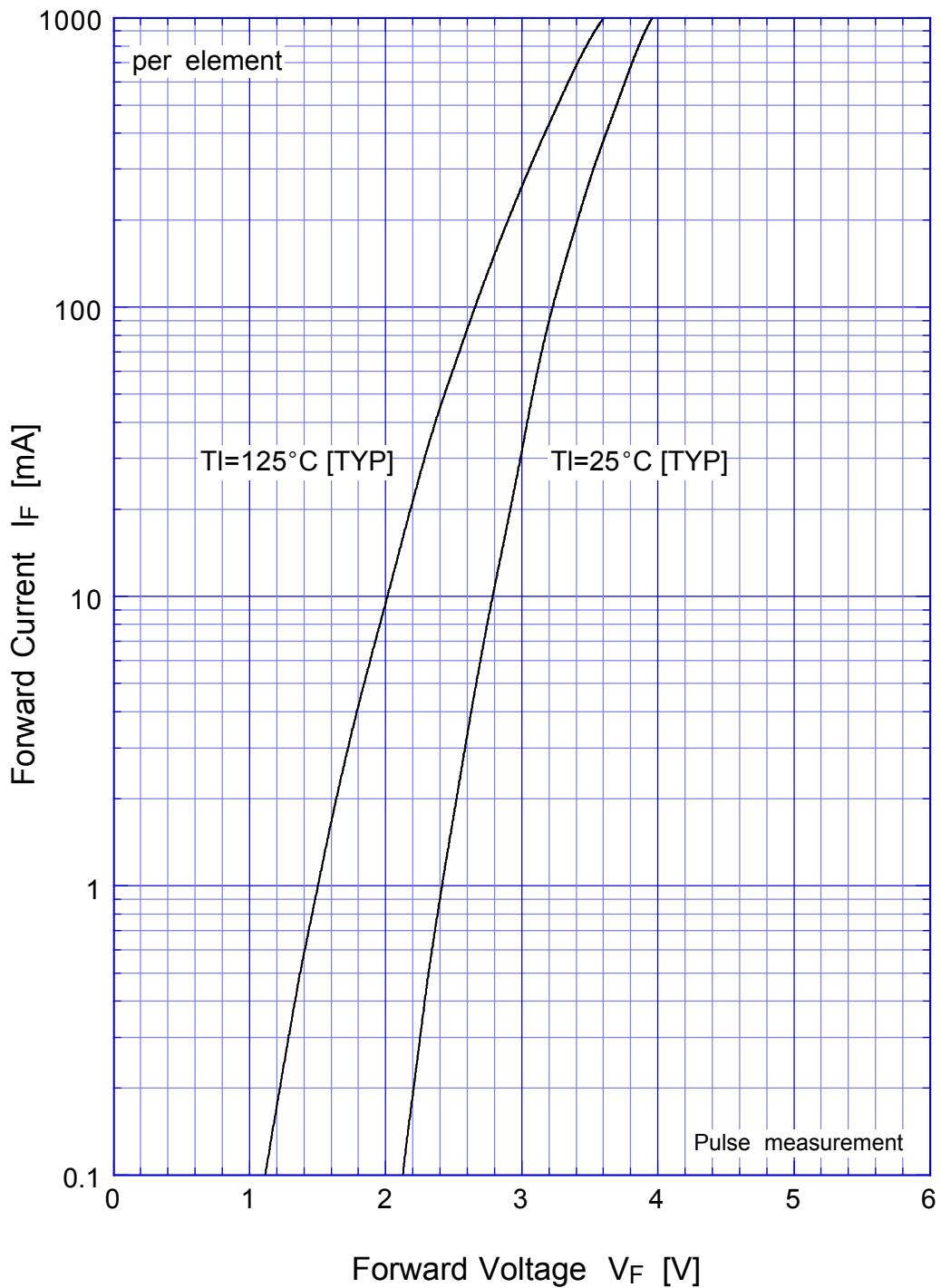
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-30~125	°C
Junction Temperature	T <sub>j</sub>		125	°C
Average Rectified Forward Current	I <sub>O</sub>	Ta = 40°C, Sine wave, R-load, Commercial frequency, On alumina substrate, 1 element operation	310	mA rms
		Ta = 40°C, Sine wave, R-load, Commercial frequency, On alumina substrate, 2 elements operation	200	
		Ta = 40°C, Sine wave, R-load, Commercial frequency, On glass-epoxy substrate, 1 element operation	200	
		Ta = 40°C, Sine wave, R-load, Commercial frequency, On glass-epoxy substrate, 2 elements operation	130	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz, Sine wave, Non-repetitive, 2 elements series operation	8	Arms
		10/200 μs, Non-repetitive, 2 elements series operation	65	A
		10/1000 μs, Non-repetitive, 2 elements series operation	30	A

#### ● Electrical Characteristics (T<sub>j</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1mA, 1 element	2.05~2.55	V
		I <sub>F</sub> = 1mA, 2 elements series	4.10~5.10	
		I <sub>F</sub> = 10mA, 1 element	2.50~3.00	
		I <sub>F</sub> = 10mA, 2 elements series	5.00~6.00	
		I <sub>F</sub> = 70mA, 1 element	2.85~3.35	
		I <sub>F</sub> = 70mA, 2 elements series	5.70~6.60	
Junction Capacitance	C <sub>j</sub>	f = 100kHz, V <sub>D</sub> = 0V, OSC = 50mV	TYP 13	pF
Thermal Resistance	θ <sub>ja</sub>	Junction to ambient, On alumina substrate, 1 element operation	MAX 90	°C/W
		Junction to ambient, On alumina substrate, 2 elements operation	MAX 150	
		Junction to ambient, On glass-epoxy substrate, 1 element operation	MAX 150	
		Junction to ambient, On glass-epoxy substrate, 2 elements operation	MAX 250	

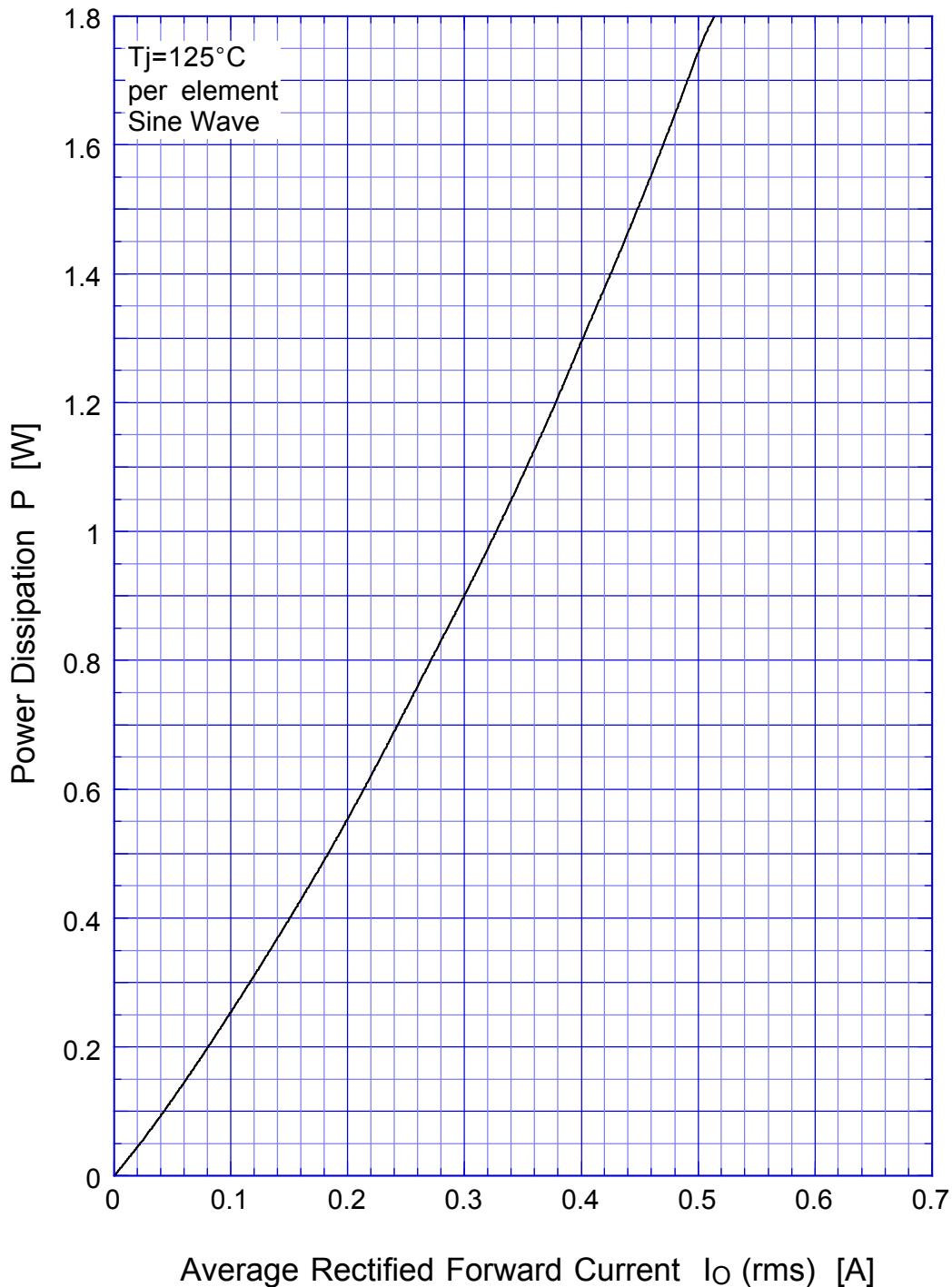
# VRYA6

## Forward Voltage

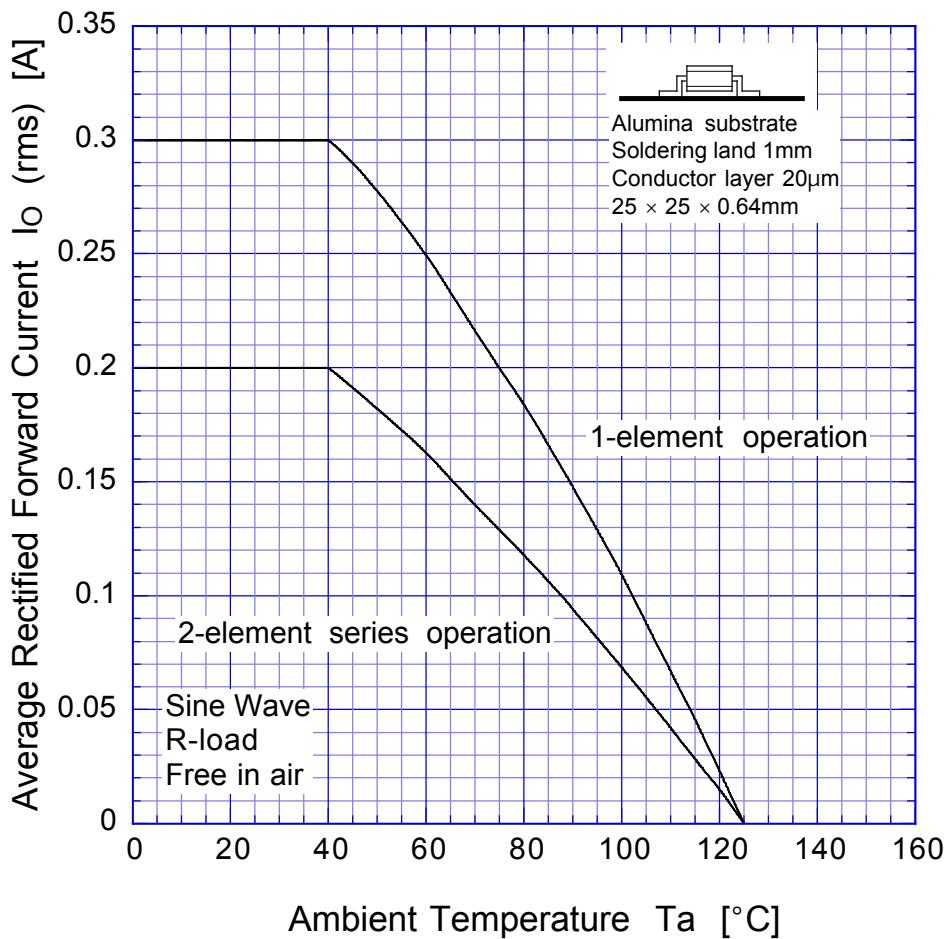


# VRYA6

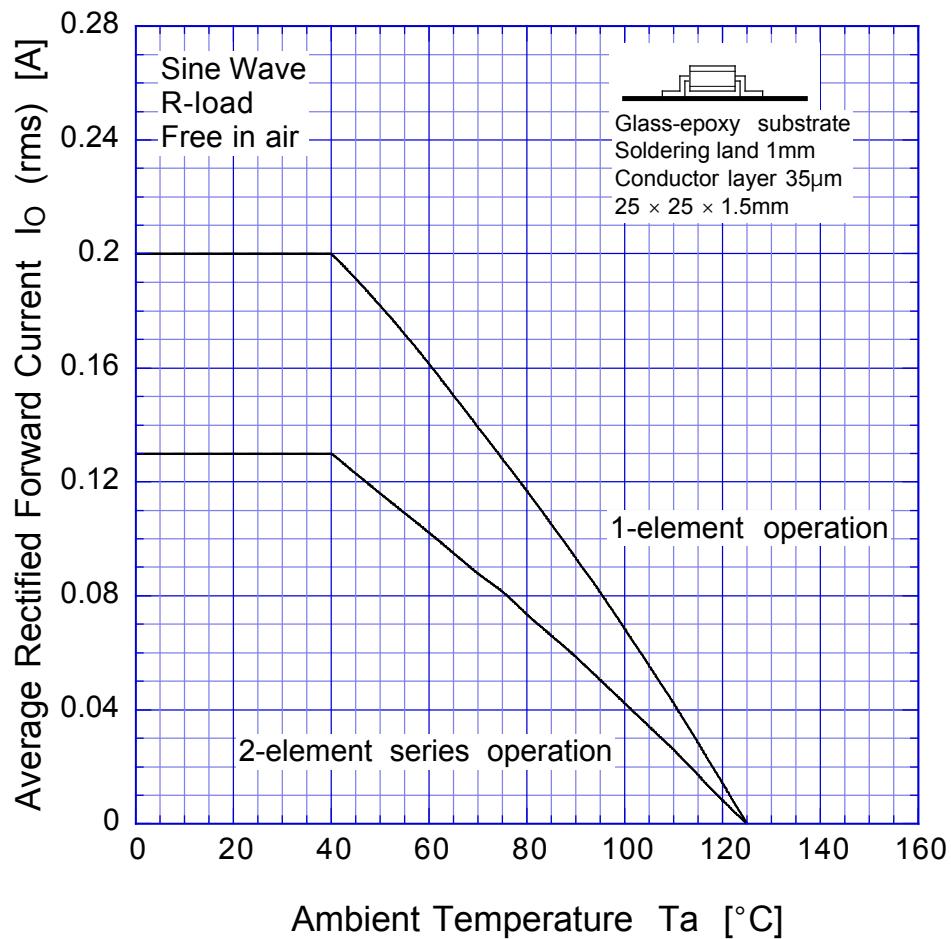
## Forward Power Dissipation



# VRYA6 Derating Curve



# VRYA6 Derating Curve



VRYA6

Peak Surge Forward Capability

