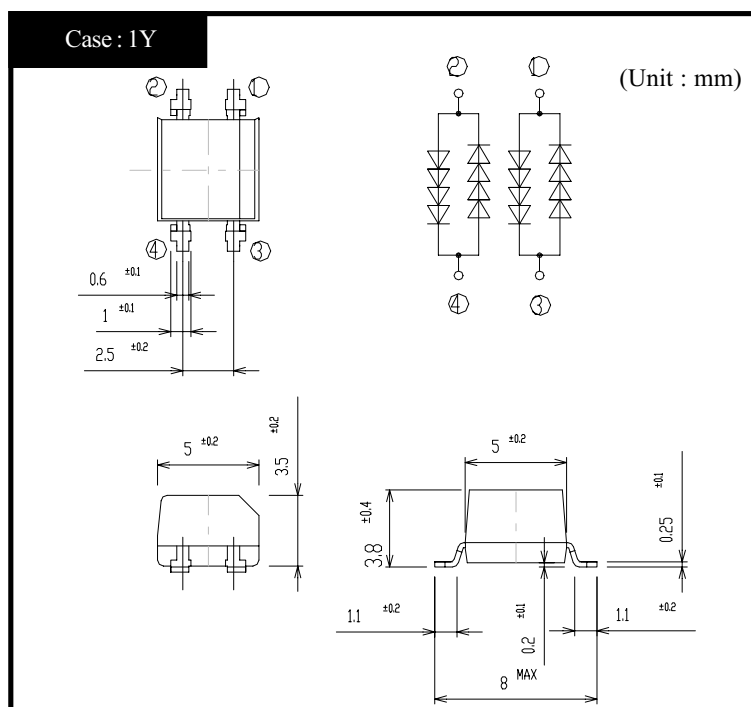


VR YA15

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

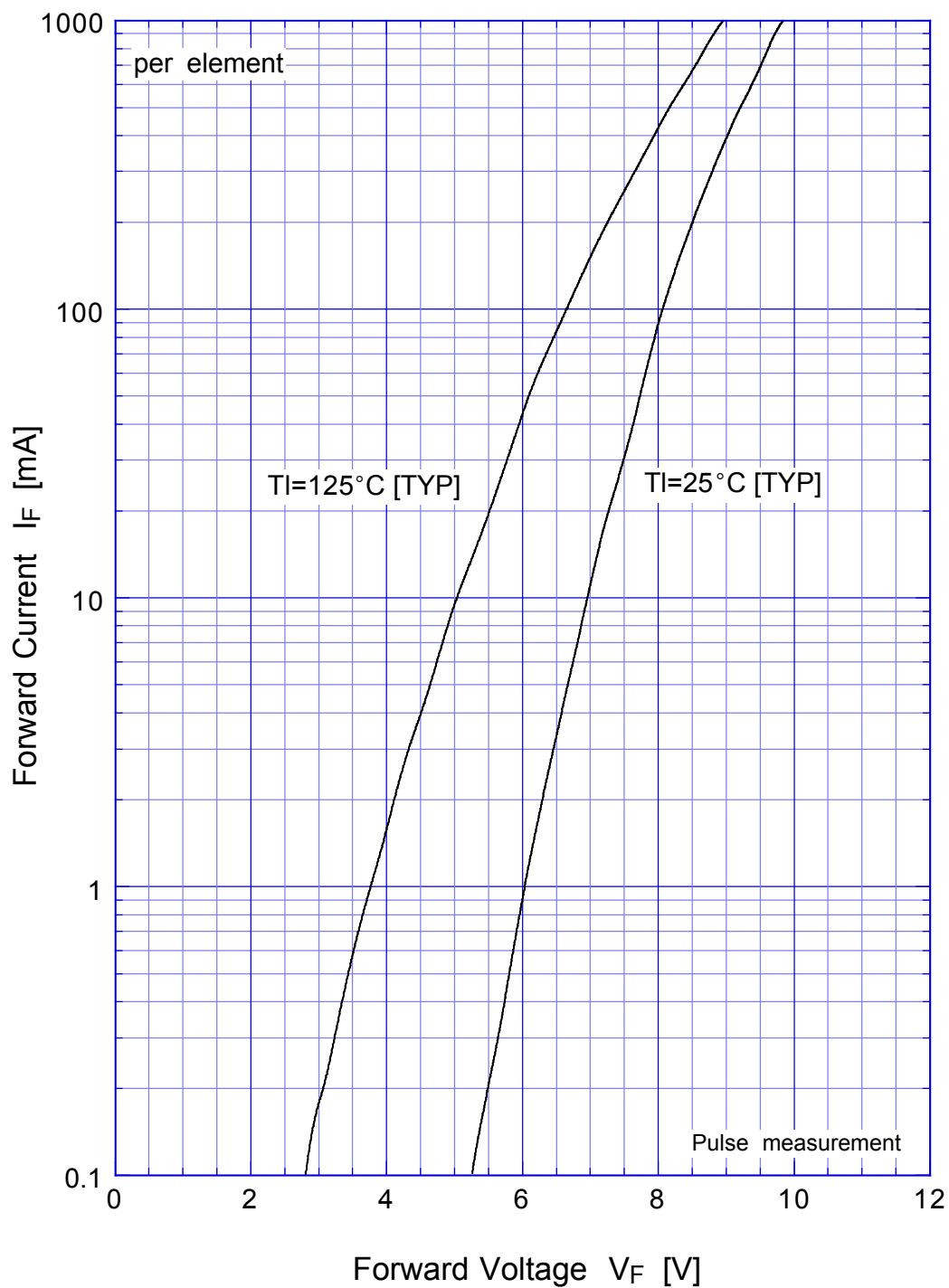
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-30~125	°C
Junction Temperature	T_j		125	°C
Average Rectified Forward Current	I_O	$T_a = 40^\circ\text{C}$, Sine wave, R-load, Commercial frequency, On alumina substrate, 1 element operation	140	mA _{rms}
		$T_a = 40^\circ\text{C}$, Sine wave, R-load, Commercial frequency, On alumina substrate, 2 elements operation	90	
		$T_a = 40^\circ\text{C}$, Sine wave, R-load, Commercial frequency, On glass-epoxy substrate, 1 element operation	90	
		$T_a = 40^\circ\text{C}$, Sine wave, R-load, Commercial frequency, On glass-epoxy substrate, 2 elements operation	50	
Peak Surge Forward Current	I_{FSM}	50Hz, Sine wave, Non-repetitive, 2 elements series operation	6.5	Arms
		10/200 μs , Non-repetitive, 2 elements series operation	50	A
		10/1000 μs , Non-repetitive, 2 elements series operation	24	A

● Electrical Characteristics ($T_l=25^\circ\text{C}$)

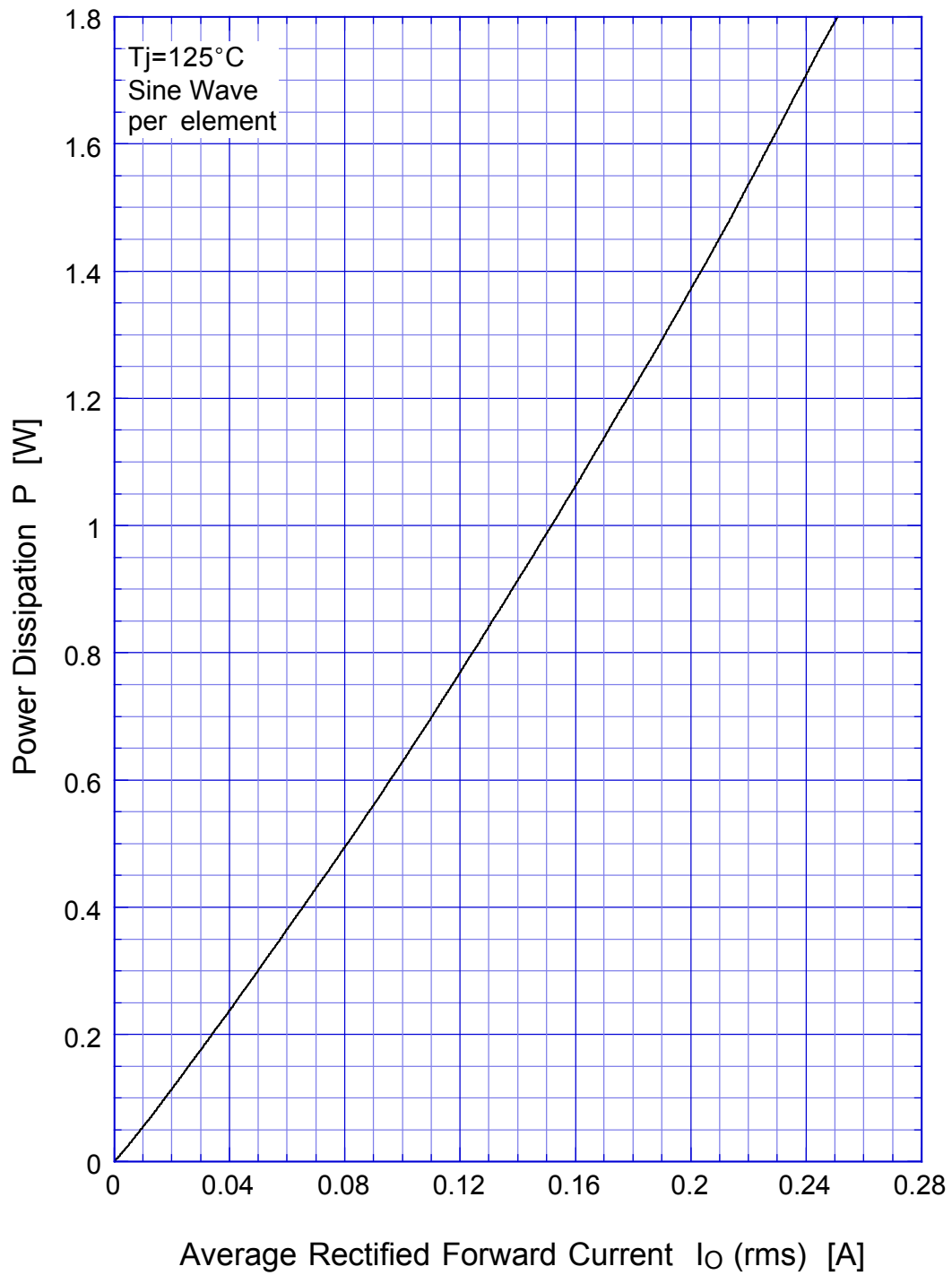
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F = 1\text{mA}$, 1 element	5.13~6.37	V
		$I_F = 1\text{mA}$, 2 elements series	10.25~12.75	
		$I_F = 10\text{mA}$, 1 element	6.25~7.50	
		$I_F = 10\text{mA}$, 2 elements series	12.50~15.00	
		$I_F = 70\text{mA}$, 1 element	7.13~8.37	
		$I_F = 70\text{mA}$, 2 elements series	14.25~16.75	
Junction Capacitance	C_j	$f = 100\text{kHz}$, $V_D = 0\text{V}$, $OSC = 50\text{mV}$	TYP 5	pF
Thermal Resistance	θ_{ja}	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	

VR YA15

Forward Voltage

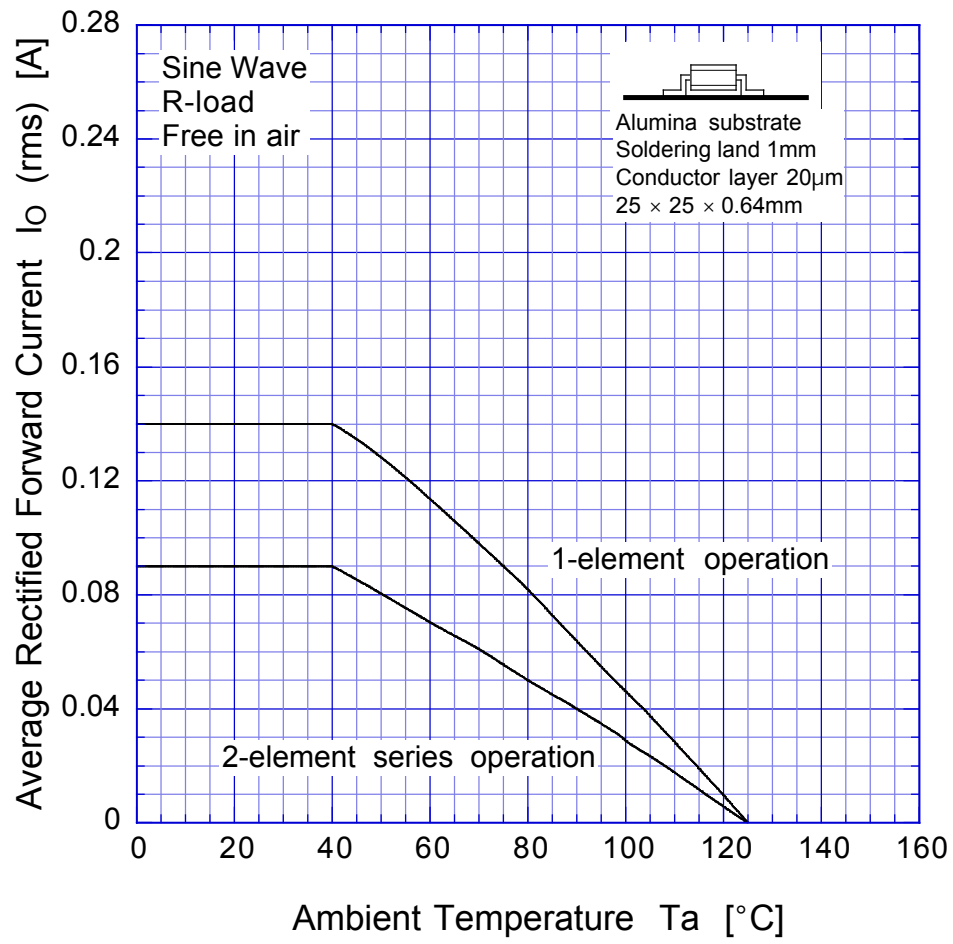


VR YA15 Forward Power Dissipation



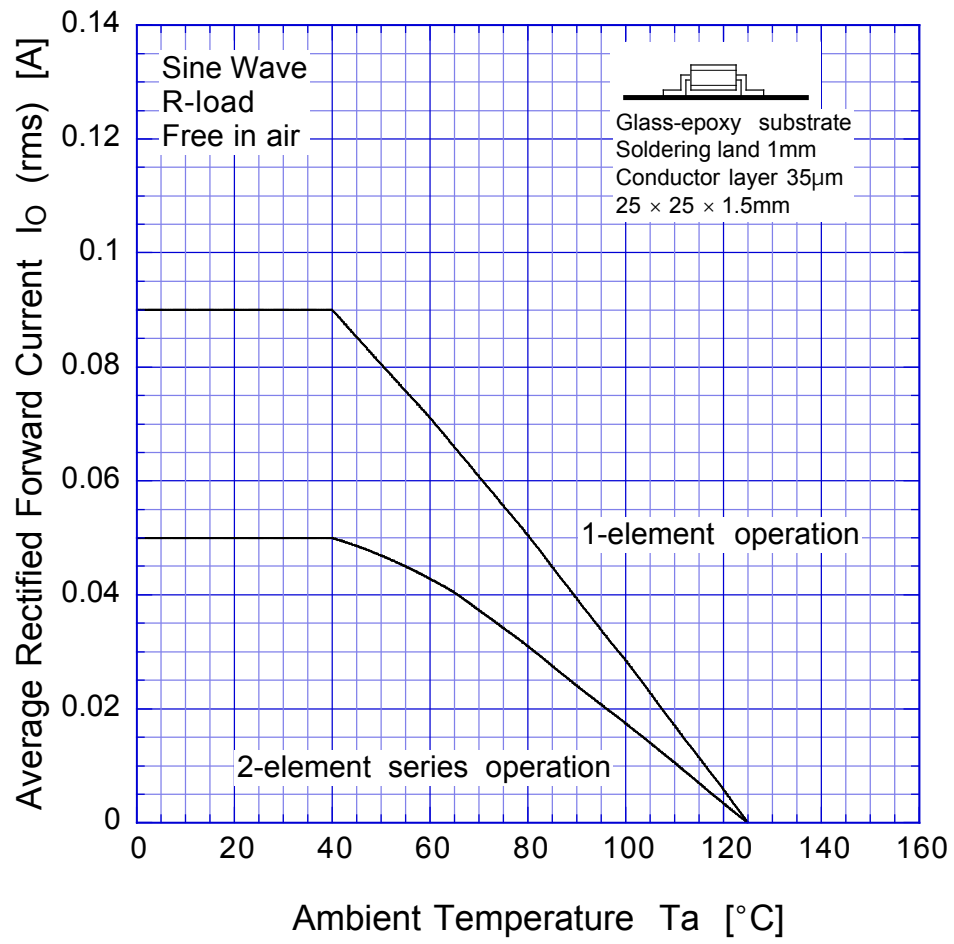
VRYA15

Derating Curve



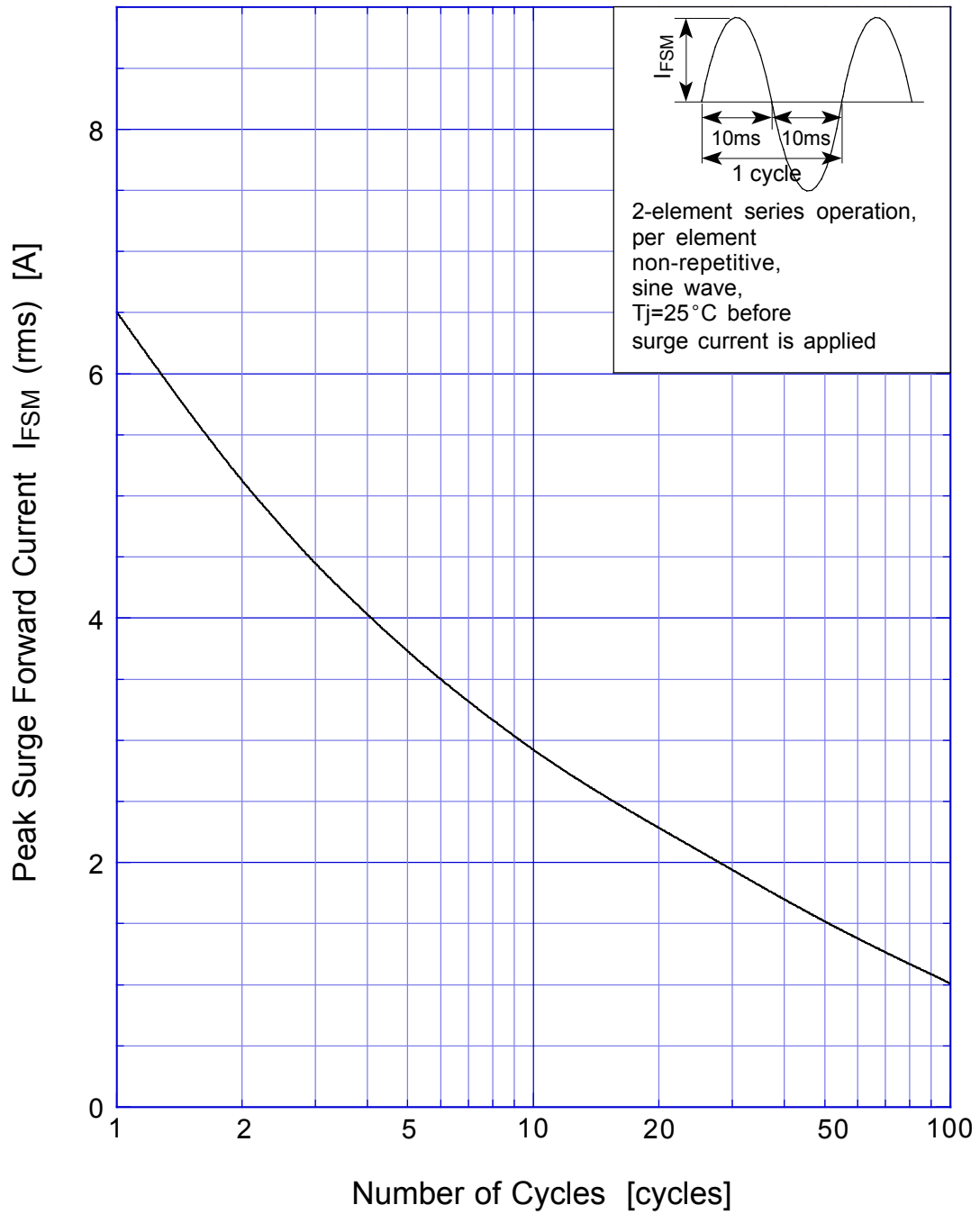
VRYA15

Derating Curve



VRYA15

Peak Surge Forward Capability



VRYA15 Junction Capacitance

