

SHINDENGEN

General Purpose Rectifiers

Dual

S1ZA60

600V 1.1A

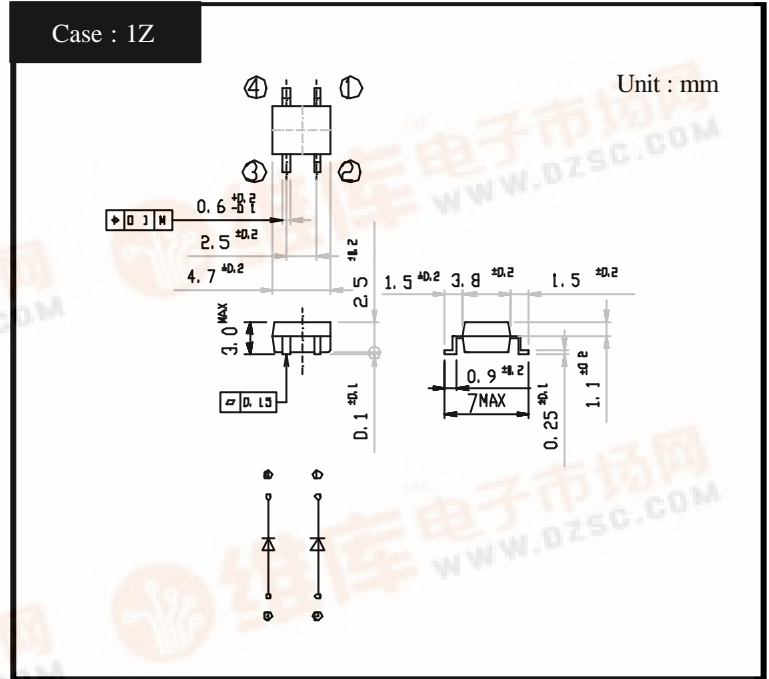
FEATURES

- Small SMT package
- Array
- High reliability with superior moisture resistance
- Applicable to Automatic Insertion

APPLICATION

- Conventional Rectification
- Motor
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified $T_I=25$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40 ~ 150	
Operating Junction Temperature	T_I		150	
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_a=25$ On alumina substrate 1 element operation	1.1	A
		50Hz sine wave, R-load, $T_a=25$ On alumina substrate 2 element operation	0.8	
		50Hz sine wave, R-load, $T_a=25$ On glass-epoxy substrate 1 element operation	0.9	
		50Hz sine wave, R-load, $T_a=25$ On glass-epoxy substrate 2 element operation	0.63	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_I=25$	30	A

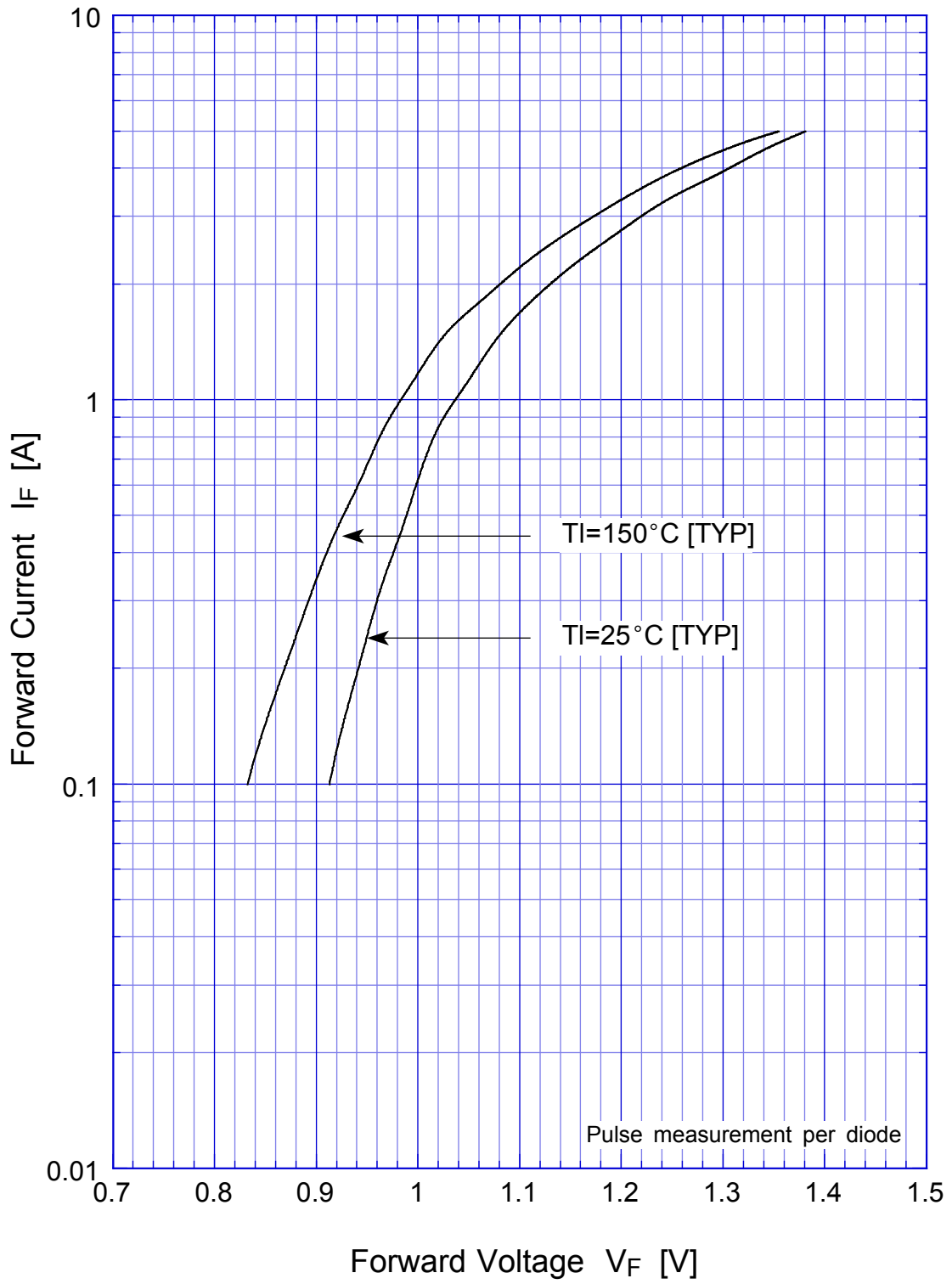
Electrical Characteristics (If not specified $T_I=25$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=0.9A$, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ_{ja}	junction to ambient On alumina substrate 1 element operation	Max.93	/W
		junction to ambient On alumina substrate 2 element operation	Max.140	
		junction to ambient On glass-epoxy substrate 1 element operation	Max.120	
		junction to ambient On glass-epoxy substrate 2 element operation	Max.186	



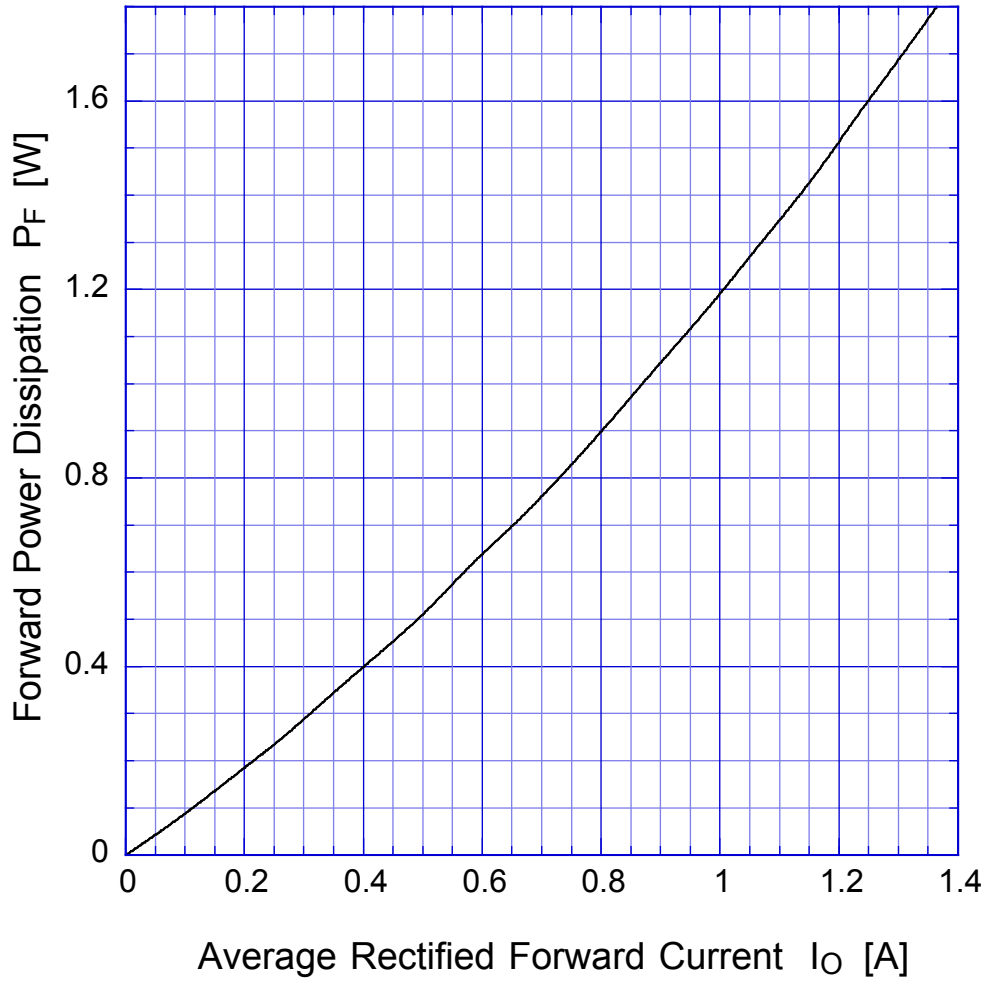
S1ZAx

Forward Voltage



S1ZAx

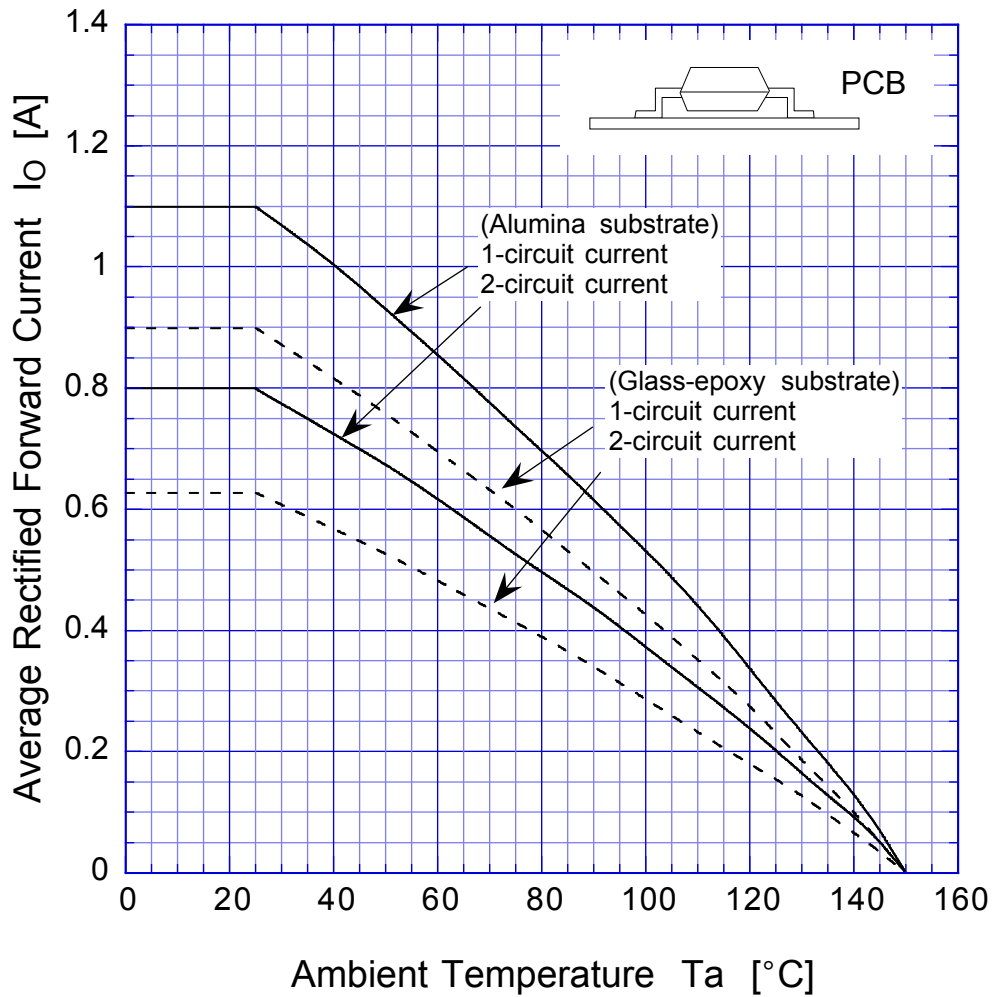
Forward Power Dissipation



$T_j = 150^\circ\text{C}$
Sine wave

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Derating Curve



Alumina substrate
Soldering land 1mm
Conductor layer 20 μ m
Substrate thickness 0.64mm

Glass-epoxy substrate
Soldering land 1mm
Conductor layer 35 μ m

Sine wave
R-load
Free in air

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Peak Surge Forward Capability

