SHINDENGEN

General Purpose Rectifiers

Dual

S1ZA60

600V 1.1A

FEATURES

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

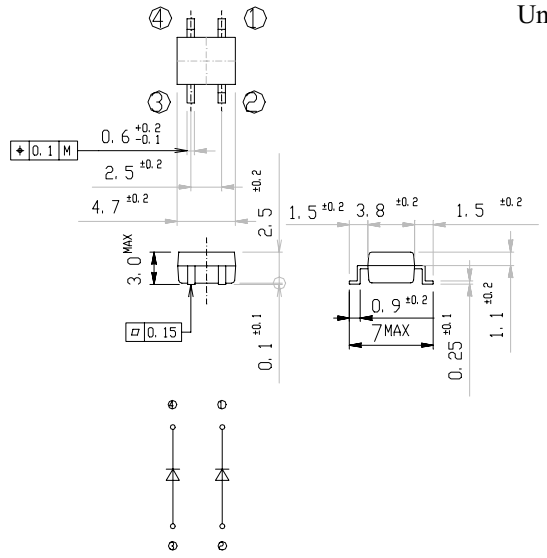
APPLICATION

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

OUTLINE DIMENSIONS

Case : 1Z

Unit : mm



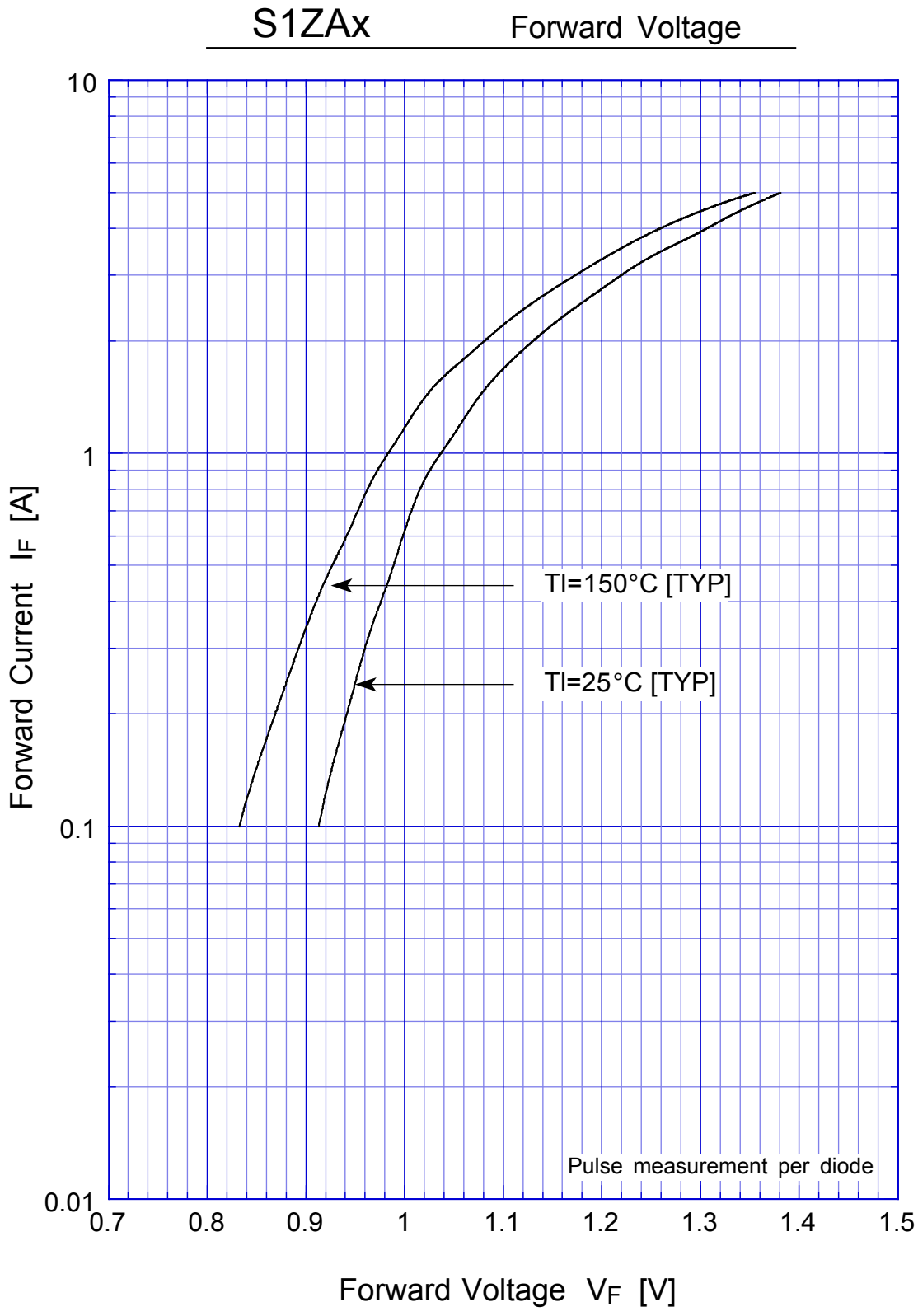
RATINGS

●Absolute Maximum Ratings (If not specified Tl=25℃)

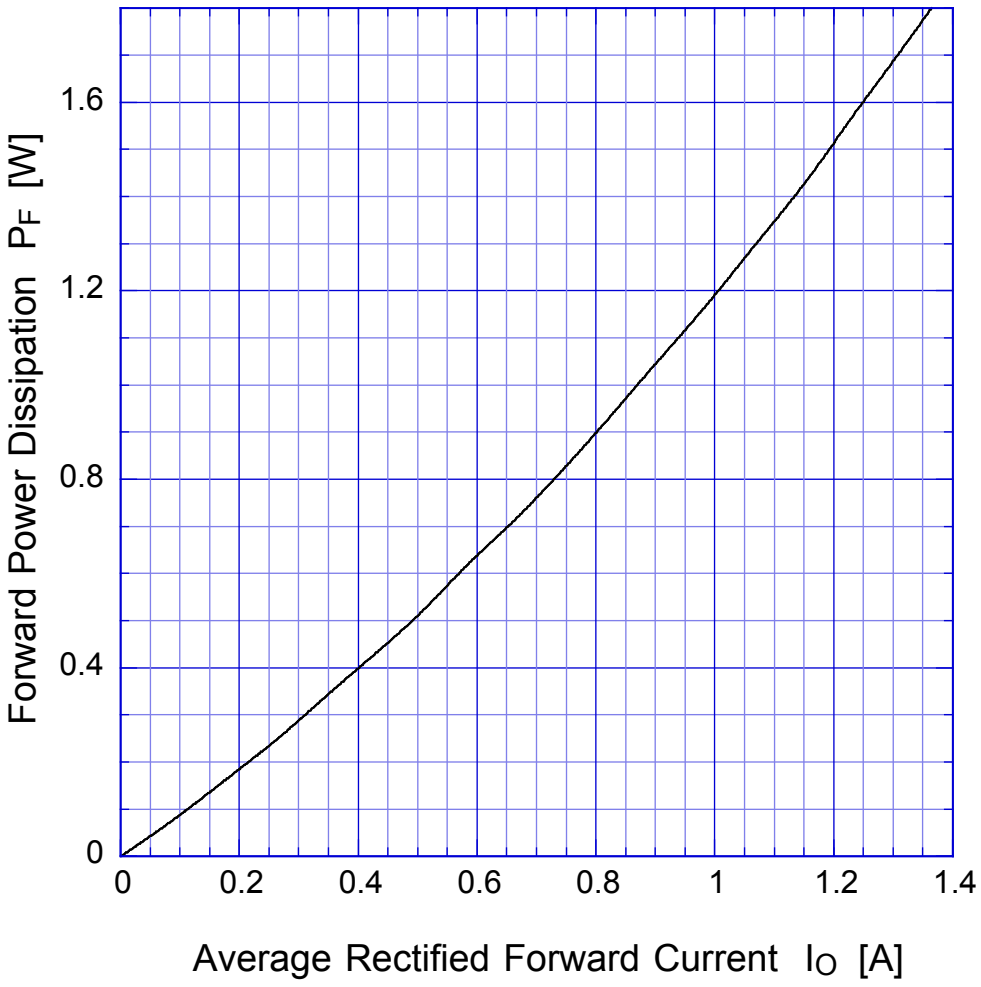
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Ta=25℃ On alumina substrate 1 element operation	1.1	A
		50Hz sine wave, R-load, Ta=25℃ On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

●Electrical Characteristics (If not specified Tl=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	θja	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	

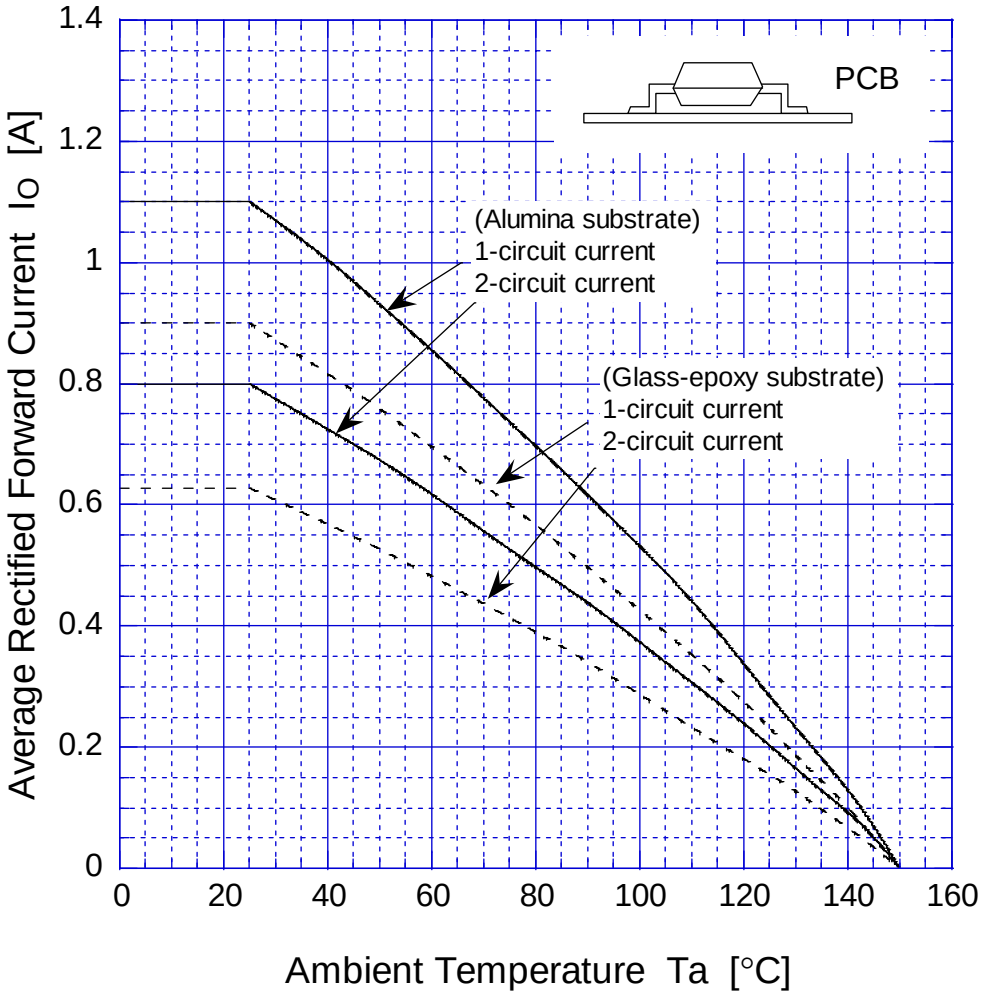

S1ZAx
Forward Voltage
10
1
0.1
0.01
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
Forward Current IF [A]
Forward Voltage VF [V]
Tl=150°C [TYP]
Tl=25°C [TYP]
Pulse measurement per diode

S1ZAx Forward Power Dissipation



Tj= 150°C
Sine wave

S1ZAx Derating Curve



Alumina substrate
Soldering land 1mm×1mm
Conductor layer 20µm
Substrate thickness 0.64mm

Glass-epoxy substrate
Soldering land 1mm×1mm
Conductor layer 35µm

Sine wave
R-load
Free in air

S1ZAx Peak Surge Forward Capability