



### Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication.

### Mechanical Data

**Package:** DO-214AC (SMA)

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** Cathode line denotes the cathode end

### Maximum Ratings (T<sub>a</sub>=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GS1Z
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Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25	I <sub>FSM</sub>	A	25
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25			50
Current squared time @1ms t 8.3ms T <sub>j</sub> =25	I <sup>2</sup> t	A <sup>2</sup> s	2.594
Storage temperature	T <sub>stg</sub>		-55 ~ +150
Junction temperature	T <sub>j</sub>		-55 ~ +150

T<sub>a</sub>=25 Unl

		UNIT	TEST CONDITIONS	GS1Z
Maximum instantaneous forward voltage	V <sub>F</sub>	V	I <sub>FM</sub> =1.0A	1.15
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	μA	T <sub>j</sub> =25	5
			T <sub>j</sub> =125	500
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	6



# GS1Z

## Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	GS1Z
Typical Thermal Resistance	R J-A(1)	/W	75
	R J-L(1)	/W	25
	R J-C(1)	/W	15

Note

- (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



**Outline Dimensions**

**Suggested Pad Layout**



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