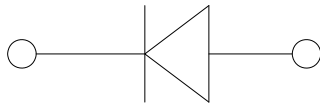
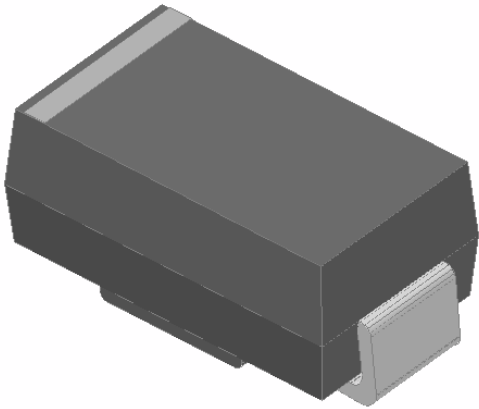


## Surface Mount General Purpose Rectifier



### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### 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 ( $T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GS1R
Device marking code			GS1R
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1300
Maximum RMS Voltage	VRMS	V	910
Maximum DC blocking Voltage	VDC	V	1300
Average rectified output current @60Hz sine wave, resistance load, TL (Fig.1)	IO	A	1.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25$	IFSM	A	30
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25$			60
Current squared time @1ms t 8.3ms $T_j=25$	I <sup>2</sup> t	A <sup>2</sup> s	3.735
Storage temperature	Tstg		-55 ~ +150
Junction temperature	Tj		-55 ~ +150

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GS1R
Maximum instantaneous forward voltage	VF	V	IFM=1.0A	1.0
Maximum DC reverse current at rated DC blocking voltage	IR	μA	$T_j=25$	5
			$T_j=125$	50
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	15



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

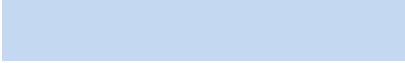
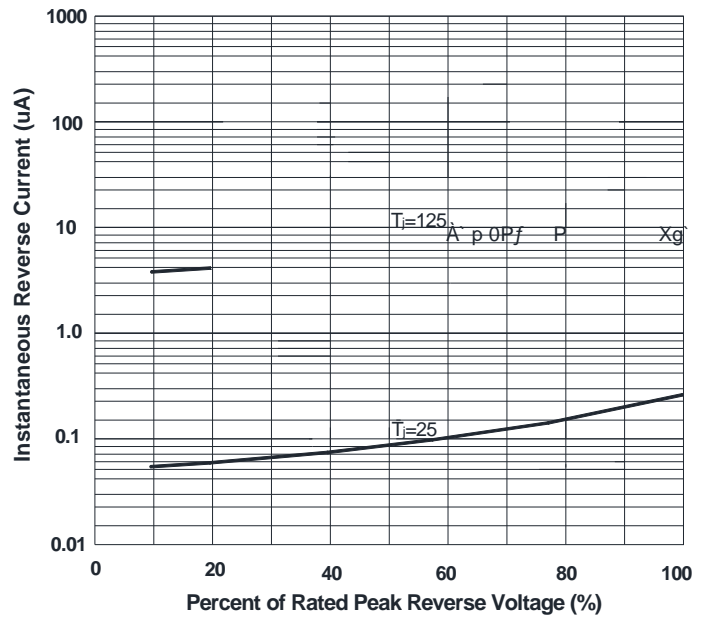




FIG.4: Typical Reverse Characteristics



Outline Dimensions

DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.00	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.05	0.20
H	0.15	0.31
I	1.70	2.10

Suggested Pad Layout

DO-214AC(SMA)	
Dim	Millimeters
P1	4.00
P2	1.50
P3	6.50
Q1	2.50
Q2	1.70



## Disclaimer

The information presented in this document is for reference onl