

# GS1A THRU GS1M

## General Purpose Rectifier

### Features

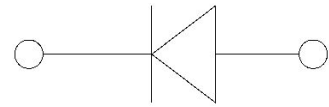
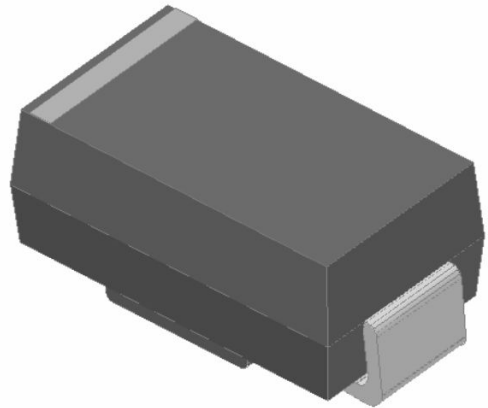
- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 265 °C max.10 s, per JESD 22-B106

### Typical Applications

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

### Mechanical Data

- Package:SMA
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity:Color band denotes cathode end



### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	$V_{DC}$	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	$I_o$	A	1						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25°C	$I_{FSM}$	A	30						
Current squared time @1ms≤t≤8.3ms Ta=25°C, Rating of per diode	$I^2t$	A <sup>2</sup> s	3.7						
Thermal Resistance(Typical) @Between junction and ambient	$R_{\theta J-A}$	°C/W	95						
Storage Temperature	$T_{stg}$	°C	-55 ~ +150						
Junction Temperature	$T_j$	°C	-55 ~ +150						

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M
Peak Forward Voltage	$V_{FM}$	V	$I_F = 1.0A$	1.1						
Peak Reverse Current	$I_{RRM}$	$\mu A$	$V_R = V_{DC} @ Ta=25^\circ C$	10						
			$V_R = V_{DC} @ Ta=125^\circ C$	50						



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## ■ Characteristics (Typical)

FIG.1: Io-TL Curve

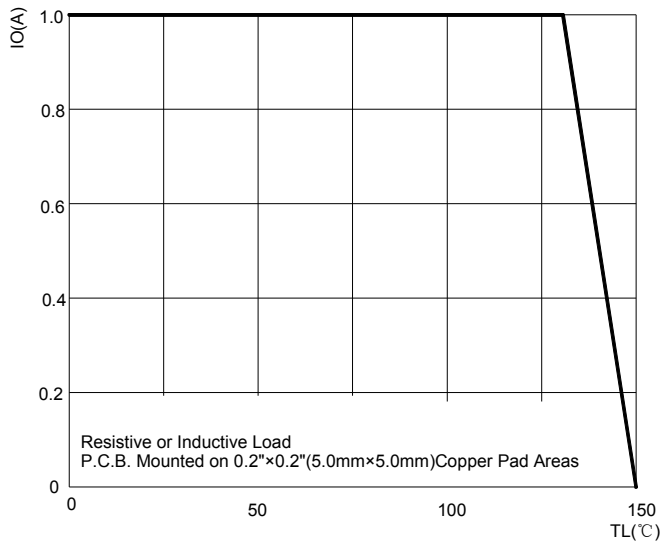


FIG.2: Forward Surge Current Capability

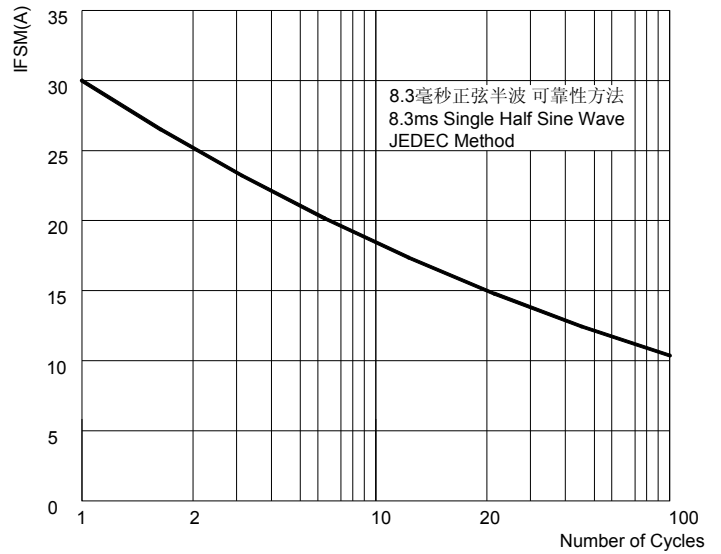


FIG.3: Forward Voltage

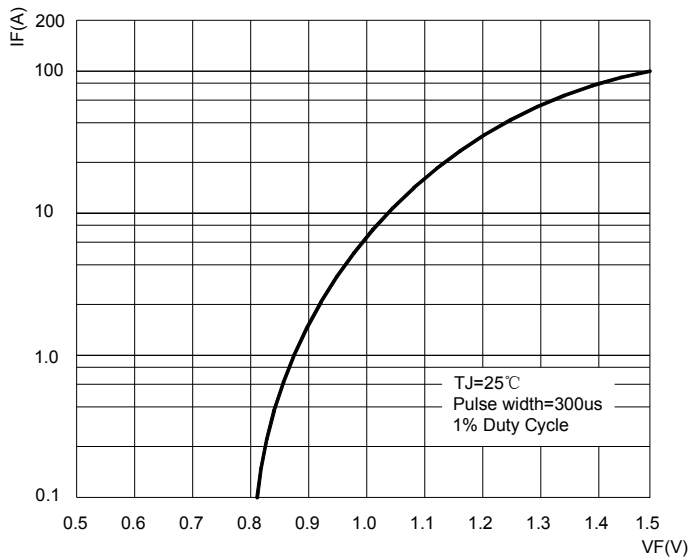
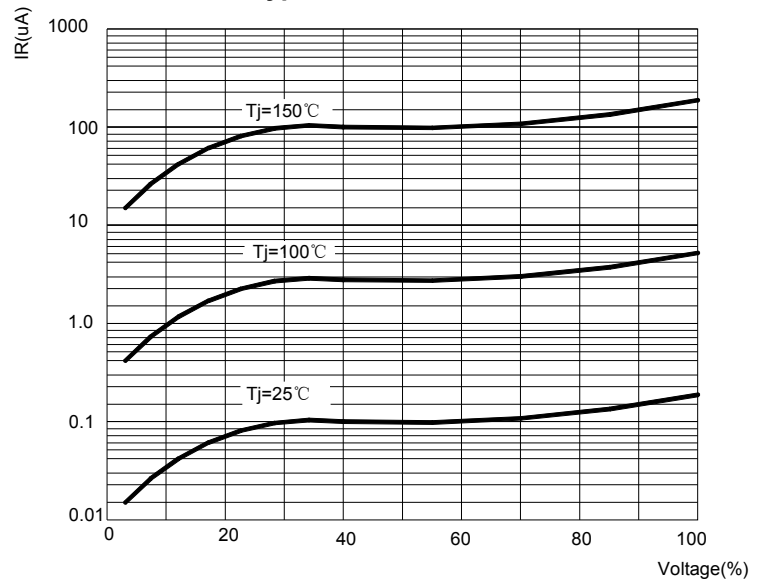


FIG.4: Typical Reverse Characteristics



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## ■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GS1A THRU GS1M	SMA	5000	10000	80000	13" reel

## ■ Outline Dimensions

