

GS1A THRU GS1M

General Purpose Rectifier

Features

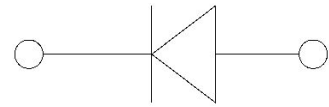
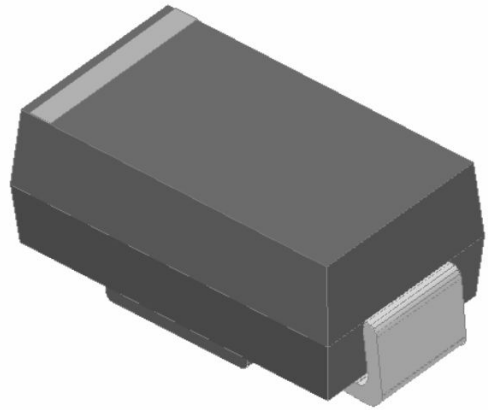
- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 265 °C max.10 s, per JESD 22-B106

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 ² 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}	μA	$V_R = V_{DC} @ Ta = 25^\circ C$	10						
			$V_R = V_{DC} @ Ta = 125^\circ C$	50						



GS1A THRU GS1M

■ Characteristics (Typical)

FIG.1: Io-TL Curve

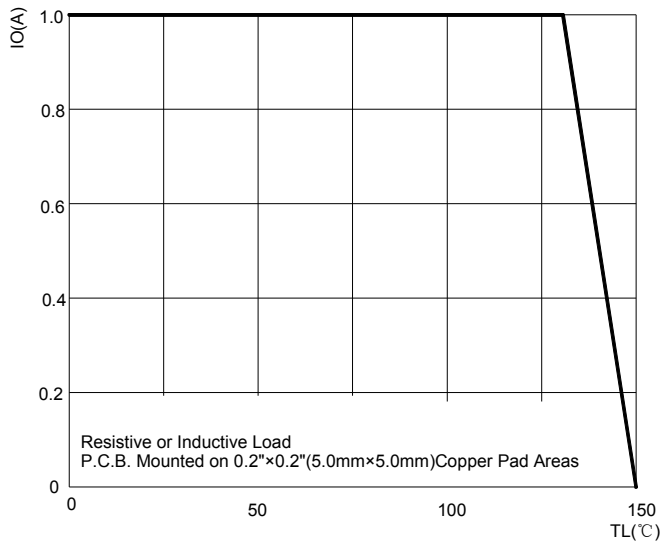


FIG.2: Forward Surge Current Capability

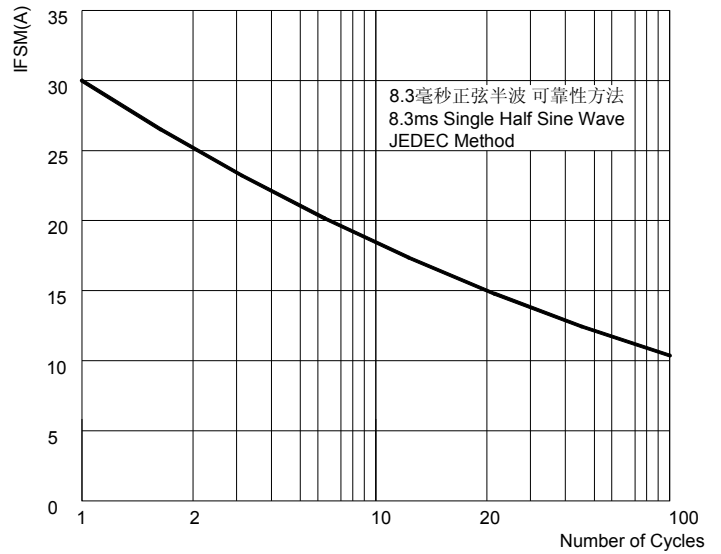


FIG.3: Forward Voltage

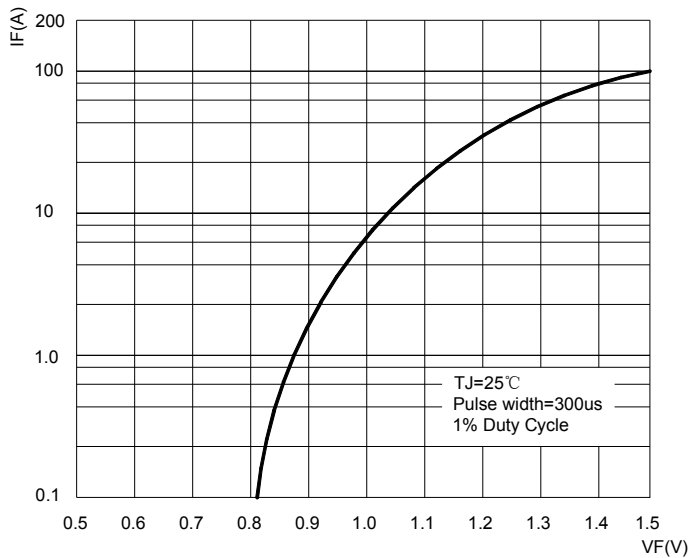
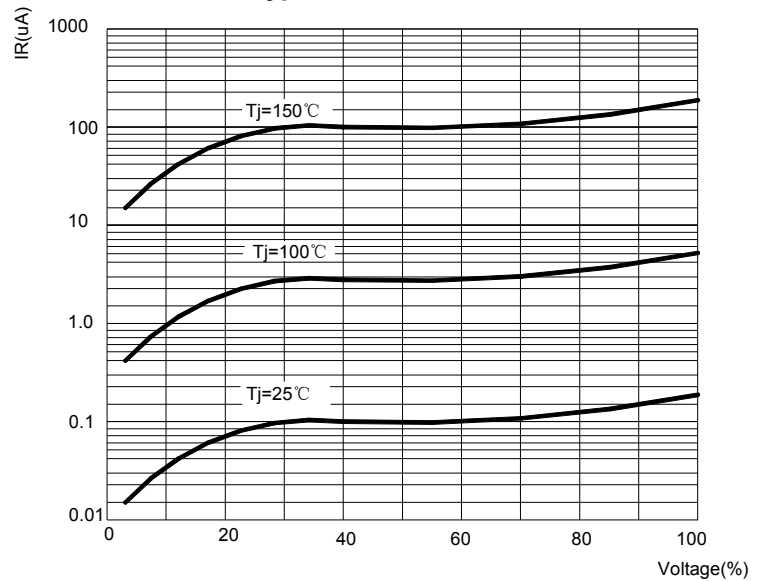


FIG.4: Typical Reverse Characteristics



GS1A THRU GS1M

■ 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

