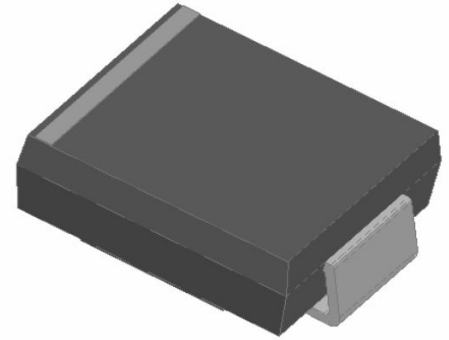


# GS5A THRU GS5M (S5A THRU S5M)

## 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

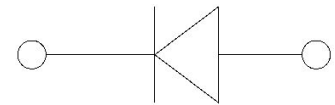


### Typical Applications

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

### Mechanical Data

- Package:SMC
- 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	GS5/S5						
			A	B	D	G	J	K	M
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V <sub>RMS</sub>	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V <sub>DC</sub>	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	I <sub>o</sub>	A	5						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25°C	I <sub>FSM</sub>	A	120						
Current squared time @1ms≤t.3≤ms Ta=25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	59.8						
Thermal Resistance(Typical) @Between junction and ambient	R <sub>θJ-A</sub>	°C/W	47						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150						

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

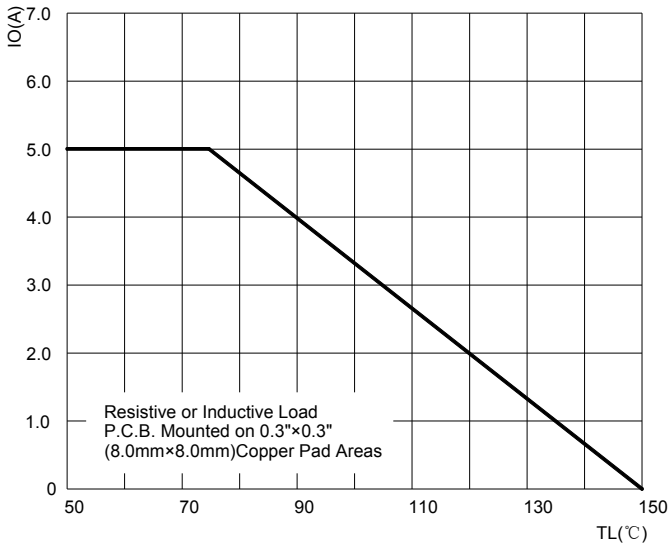
PARAMETER	Symbol	Unit	Conditions	GS5/S5						
				A	B	D	G	J	K	M
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>F</sub> =5.0A	1.15						
Peak Reverse Current	I <sub>RRM</sub>	μA	VR =V <sub>DC</sub> @Ta=25°C	10						
			VR =V <sub>DC</sub> @Ta=125°C	250						



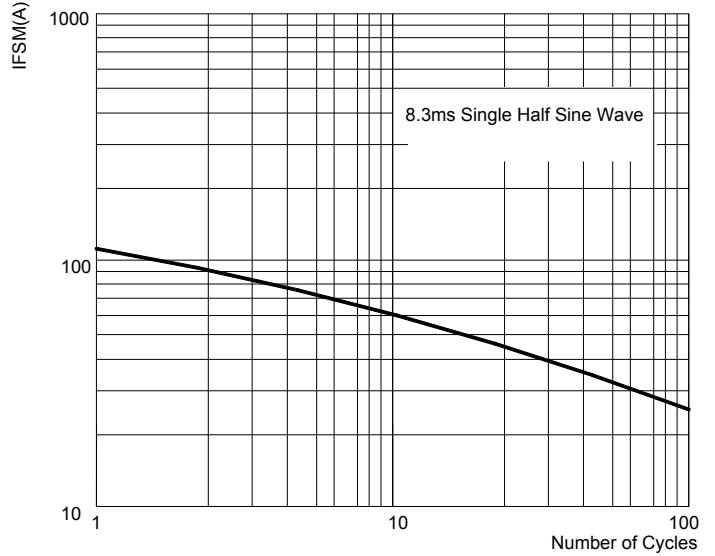
# GS5A THRU GS5M (S5A THRU S5M)

## ■ Characteristics (Typical)

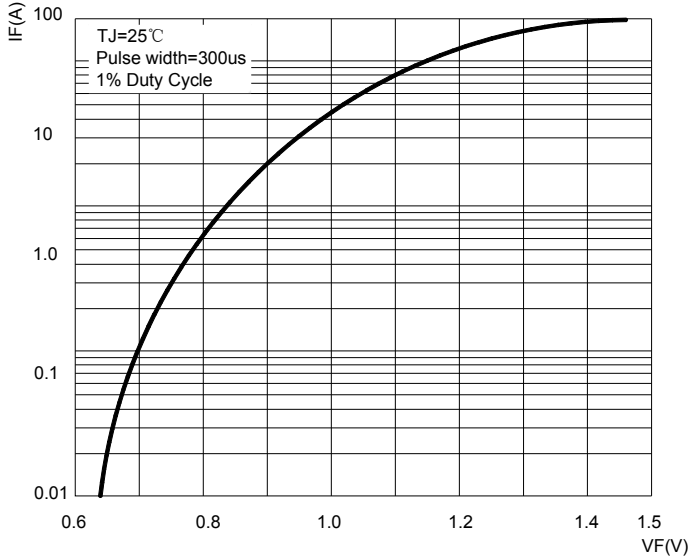
**FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve**



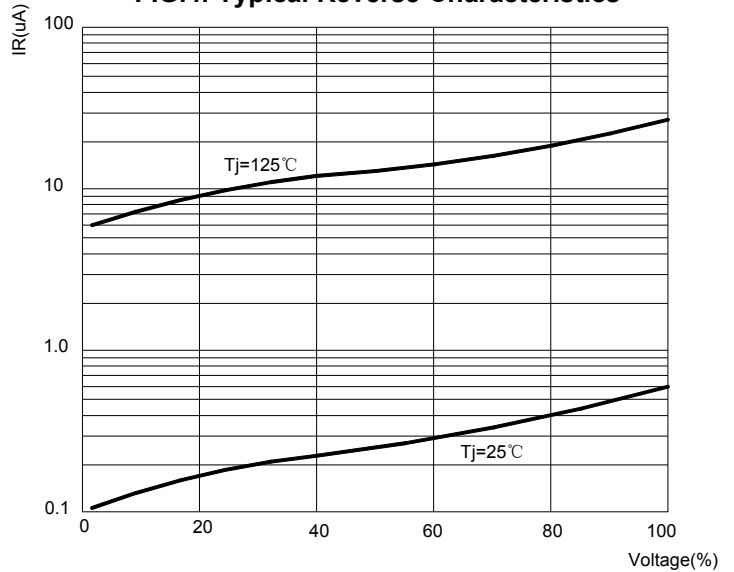
**FIG.2: Forward Surge Current Capability**



**FIG.3: Forward Voltage**



**FIG.4: Typical Reverse Characteristics**



## GS5A THRU GS5M (S5A THRU S5M)

### ■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GS5A THRU GS5M (S5A THRU S5M)	SMC	3000	6000	42000	13" reel

### ■ Outline Dimensions

