

## 1. FEATURES

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Low forward voltage drop



## 2. MECHANICAL DATA

- Package: DO-214AA (SMB)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002
- Polarity: As marked

## 3. MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

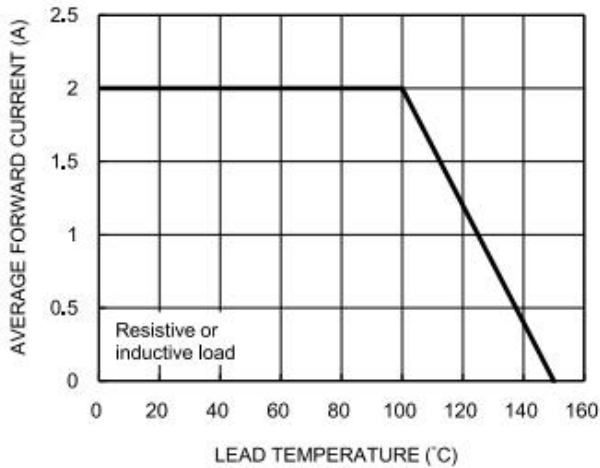
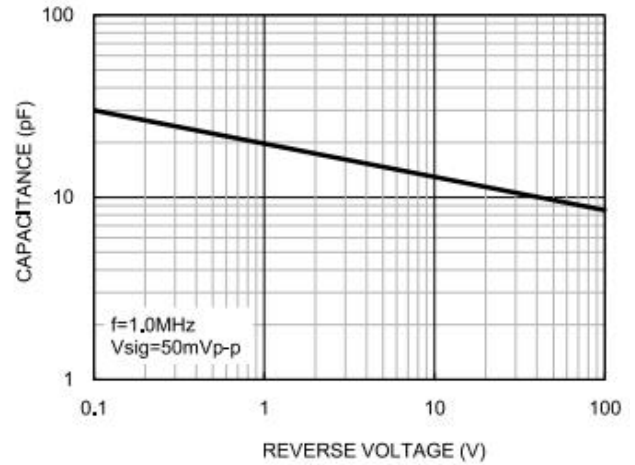
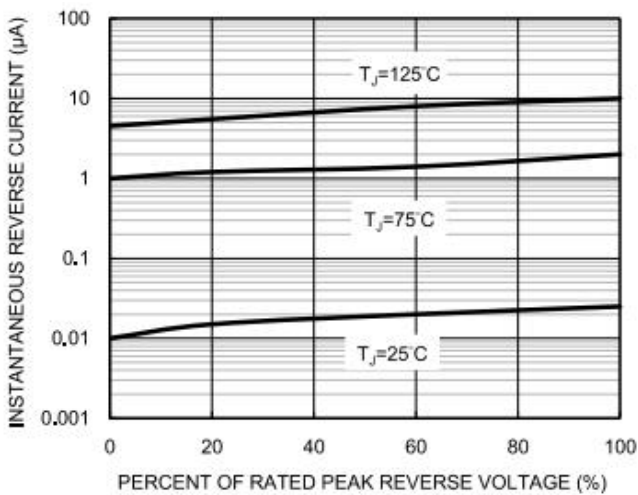
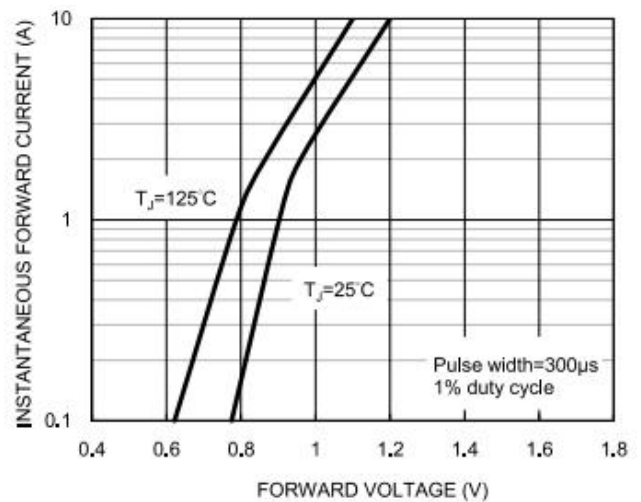
PARAMETER	SYMBOL	GS2A	GS2B	GS2D	GS2G	GS2J	GS2K	GS2M	GS2Q	GS2V	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	1400	v	
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	840	980	v	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1200	1400	v	
Maximum average forward rectified current	$I_{F(AV)}$	2									A	
Surge(non-repetitive)forward current@60Hz Half-sine wave,1 cycle, $T_a=25^\circ\text{C}$	$I_{FSM}$	50									A	
Typical Junction capacitance@ $V_R=4.0\text{V},1\text{MHZ}$	$C_J$	30									pF	
Storage temperature	$T_{STG}$	-55~+150									$^\circ\text{C}$	
Junction temperature	$T_J$	-55~+150									$^\circ\text{C}$	
Typical Thermal Resistance	$R_{\theta J-A}$	53									$^\circ\text{C}/\text{W}$	
	$R_{\theta J-L}$	16									$^\circ\text{C}/\text{W}$	
Maximum forward voltage @ $I_F=2\text{A}$ <sup>Note1</sup>	$V_F$	1.15									v	
Maximum reverse current @rated $V_R$ <sup>Note2</sup>	$T_J=25^\circ\text{C}$	$I_R$	1									uA
	$T_J=125^\circ\text{C}$		125									
Typical reverse recovery time @ $I_F=0.5\text{A},I_R=1.0\text{A},I_{RR}=0.25\text{A}$	$t_{rr}$	1.5									uS	

**Note 1:** Pulse test with PW=0.3mS

**Note 2:** Pulse test with PW=30mS



## 4. CHARACTERISTICS (typical)

**Fig.1: Forward Current Derating Curve**

**Fig.2: Typical Junction Capacitance**

**Fig.3: Typical Reverse Characteristics**

**Fig.4: Typical Forward Characteristics**


## 5. SMB(DO-214AA) PACKAGE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	Min.	Max.	Min.	Max.
A	1.96	2.20	0.077	0.087
B	4.35	4.85	0.171	0.191
C	3.30	3.94	0.130	0.155
D	2.20	2.50	0.087	0.098
E	0.76	1.52	0.030	0.060
F	0.02	0.20	0.001	0.008
G	5.08	5.59	0.200	0.220
H	0.15	0.30	0.006	0.012

## 6. RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	MILLIMETERS		INCHES	
	Min.	Max.	Min.	Max.
A	2.20	-	0.087	-
B	1.45	-	0.057	-
C	-	2.55	-	0.100
D	1.45	-	0.057	-
E	5.60 REF		0.220 REF	

## 7. ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
GS2A-GS2V	DO-214AA(SMB)	3000PCS	13"



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