

## General Standard Diodes

GS1A~GS1M

DO-214AC(SMA)

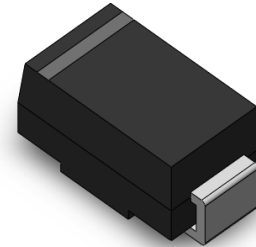
### Feature

- u Low profile space
- u Ideal for automated placement
- u Glass passivated chip junctions
- u Low forward voltage drop
- u Low leakage current
- u High forward surge capability
- u High temperature soldering:  
260°C/10 seconds at terminals

### Mechanical Date

- u Case: JEDEC DO-214AC molded plastic body over glass passivated chip
- u Terminals: Solder plated, solderable per JESD22-B102
- u Polarity: Laser band denotes cathode end

DO-214AC/SMA



### Major Ratings and Characteristics

$I_{F(AV)}$	1.0 A
$V_{RRM}$	50 V to 1000 V
$I_{FSM}$	30 A
$I_R$	5 $\mu$ A
$V_F$	1.1 V
$T_J$ max.	150 °C

### Maximum Ratings & Thermal Characteristics(TA = 25°C unless otherwise noted)

Items	Symbol	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	1							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Thermal resistance from junction to lead <sup>(1)</sup>	$R_{\theta JL}$	35							°C/W
Thermal resistance from junction to ambient <sup>(1)</sup>	$R_{\theta JA}$	107							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

Note 1: Mounted on P.C.B. with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

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### Electrical Characteristics(TA=25°C unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage	$I_F=1\text{ A}^{(2)}$	$V_F$	-	0.98	1.10	V
Reverse current	$V_R=V_{DC}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	-	-	5 50	$\mu\text{A}$
Typical junction capacitance	4.0 V ,1MHz	$C_J$	-	15.0	-	pF

Note 2: Pulse test:300 $\mu\text{s}$  pulse width,1% duty cycle.

### Characteristic Curves (TA = 25°C unless otherwise noted)

Fig1. Forward Current Derating Curve

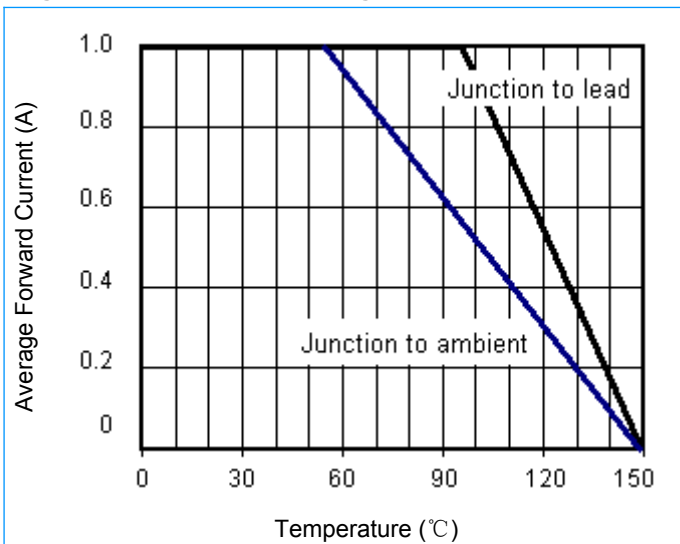


Fig2. Maximum Non-Repetitive Peak Forward Surge Current

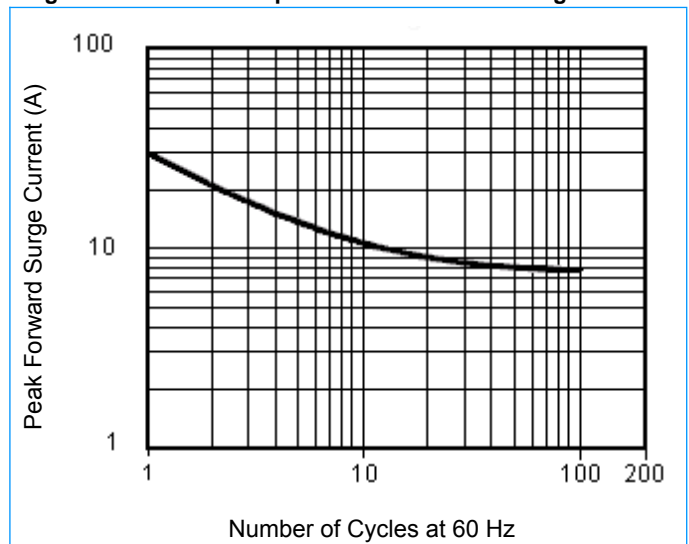


Fig3. Typical Instantaneous Forward Characteristics

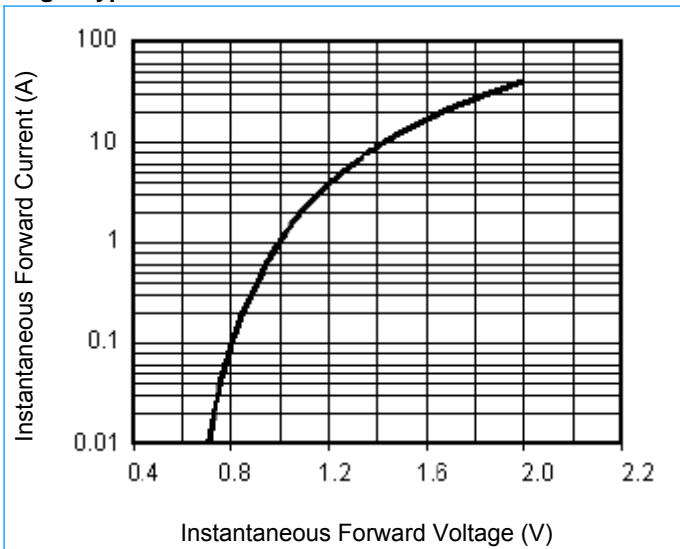
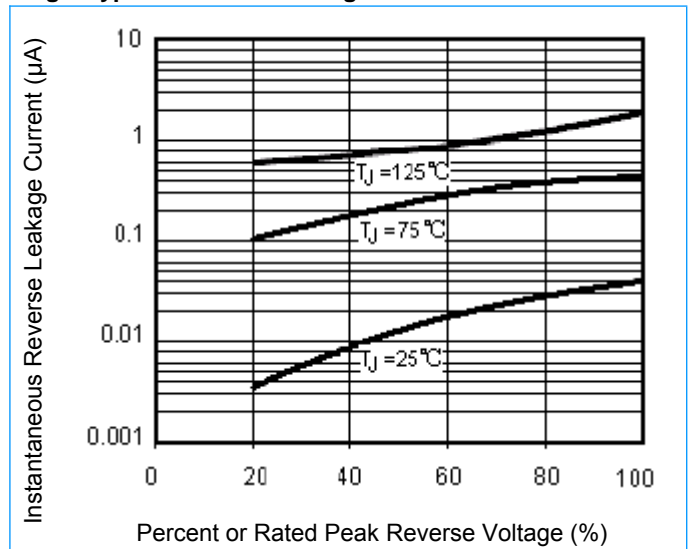


Fig4. Typical Reverse Leakage Characteristics

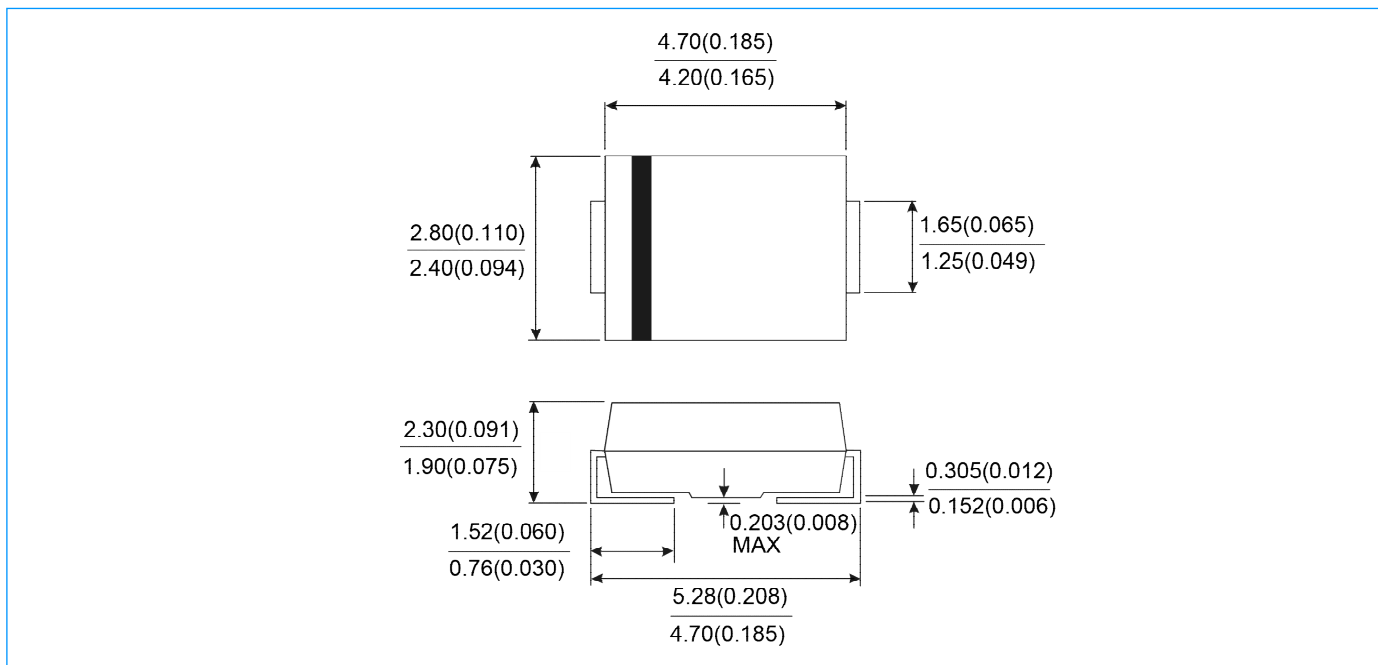


# General Standard Diodes

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## eDO-214AC(SMA) Package Outline (Unit: mm(inch))



## Packaging Information

Part Number	Component Package	Quantity
GS1A~GS1M	DO-214AC(SMA)	5000 PCS/REEL