

## ASR2A~ASR2M(GS2A~GS2M) Surface Mount Standard Rectifiers

### Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
$V_{RRM}$	50 V to 1000 V
$I_{FSM}$	60 A
$I_R$	5 $\mu$ A
$V_F$	1.1 V
$T_j$ max.	150 °C

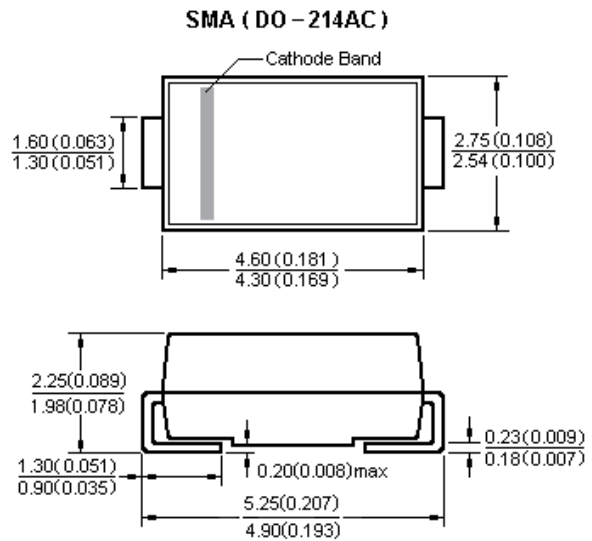


### Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Data

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



Dimensions in millimeters and (inches)

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

( $T_A = 25\text{ °C}$  unless otherwise noted)

	Symbol	ASR2A (GS2A)	ASR2B (GS2B)	ASR2D (GS2D)	ASR2G (GS2G)	ASR2J (GS2J)	ASR2K (GS2K)	ASR2M (GS2M)	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	$I_{F(AV)}$	2							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	60							A
Maximum instantaneous forward voltage at 2.0A	$V_F$	1.1							V
Maximum DC reverse current $T_A = 25\text{ °C}$ at Rated DC blocking voltage $T_A = 125\text{ °C}$	$I_R$	5.0							$\mu$ A
		125							$\mu$ A
Typical junction capacitance at 4.0 V ,1MHz	$C_J$	30							p F
Thermal resistance from junction to ambient	$R_{\theta JA}$	75							°C/ W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

## Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

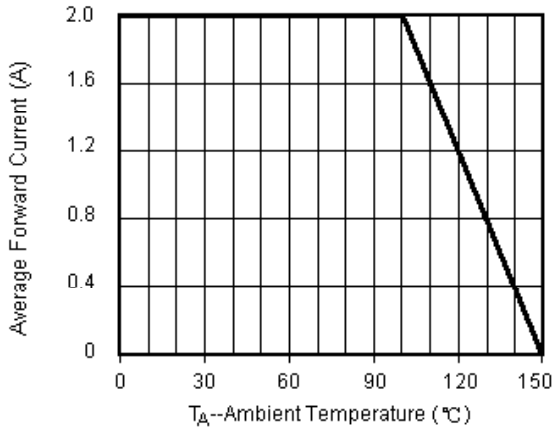


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

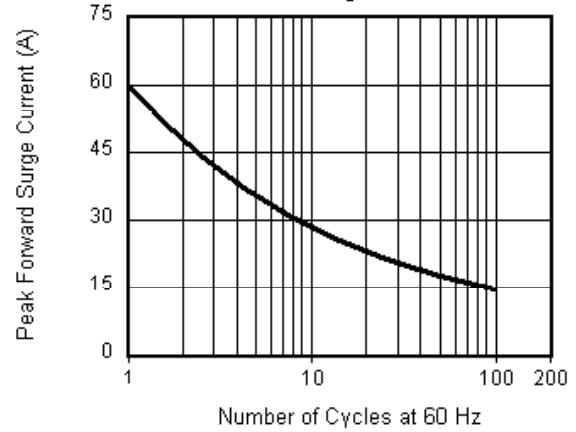


Fig.3 Typical Instantaneous Forward Characteristics

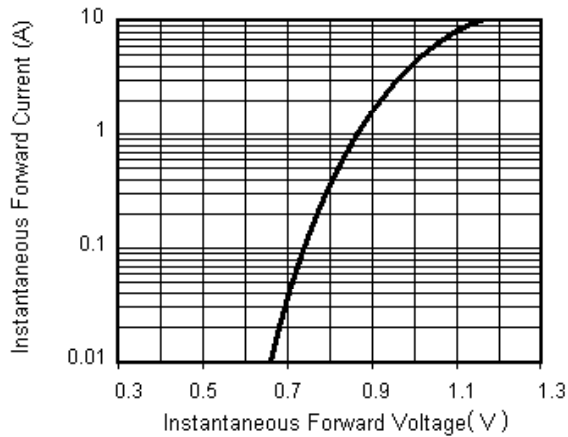


Fig.4 Typical Reverse Leakage Characteristics

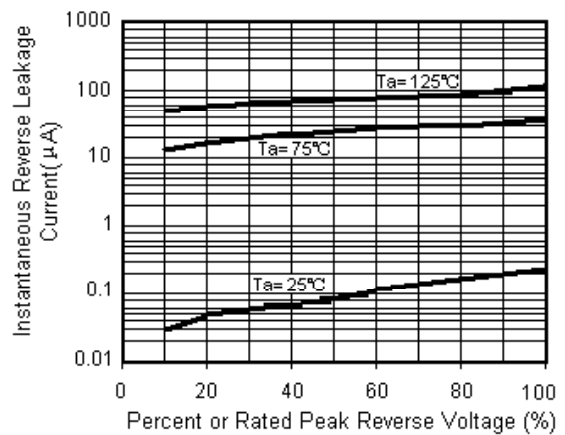


Fig.5 Typical Junction Capacitance

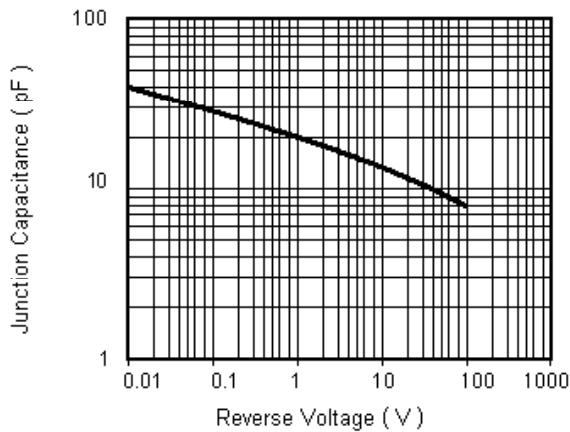


Fig.6 Transient Thermal Impedance

