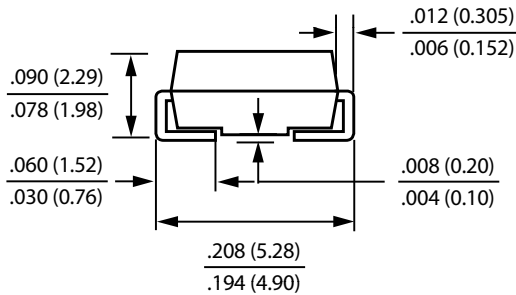
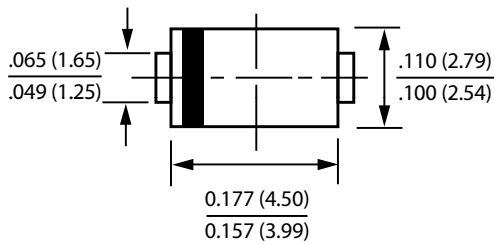




# S2AA thru S2WA



## General Purpose Rectifiers Glass Passivation Junction



### DO-214AC(SMA)

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
S2xA	General
S2xA-H	Halogen Free
S2xA-Q	Automotive

PRIMARY CHARACTERISTICS	
$I_F$	2A
$V_{RRM}$	50~2000V
$I_{FSM}$	60A
$V_F$	1.1, 1.2, 1.3 V
$T_J$ max	150°C

### Features

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

### Mechanical Data

- DO-214AC(SMA)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish)  
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.062 grams (approximate)

### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	S2 AA	S2 BA	S2 DA	S2 GA	S2 JA	S2 KA	S2 MA	S2 TA	S2 WA	S2 XA	S2 YA	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	910	1120	1260	1400	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum average forward rectified current	$I_F$	2.0											A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	60.0											A
Maximum Instantaneous Forward Voltage $I_F=2A @ 25^\circ C$	$V_F$	1.1								1.2	1.3	V	
Maximum DC Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=100^\circ C$	$I_R$	5								100		uA	
Typical Junction Capacitance(NOTE1)	$C_j$	50										pF	
Typical Thermal Resistance	$R_{\theta Ja}$	100										°C/W	
Operating Temperature Range	$T_J$	-55 to +150											°C
Storage Temperature Range	$T_{STG}$	-55 to +150											°C

### NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.1"×0.15" copper pad.



## General Purpose Rectifiers Glass Passivation Junction

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

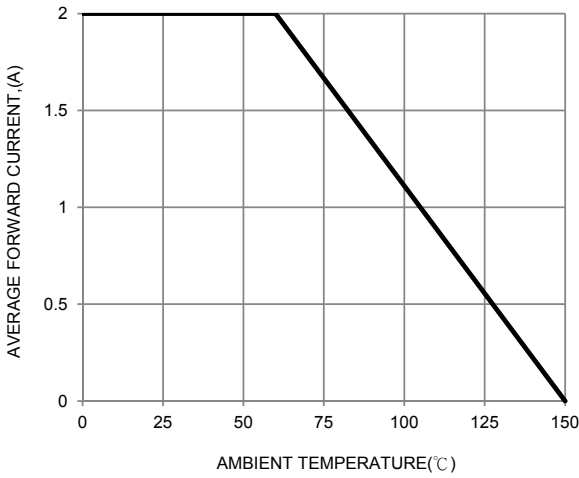


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

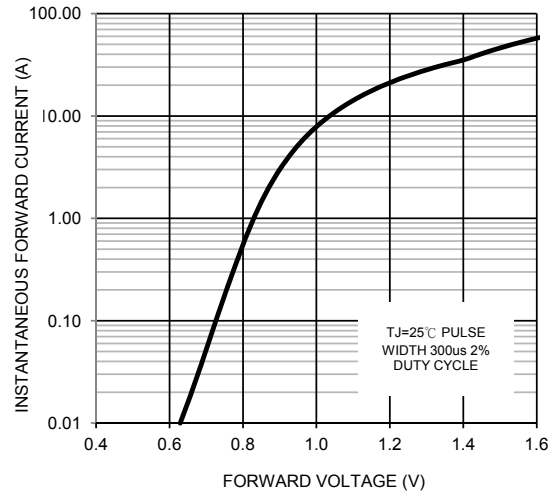


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

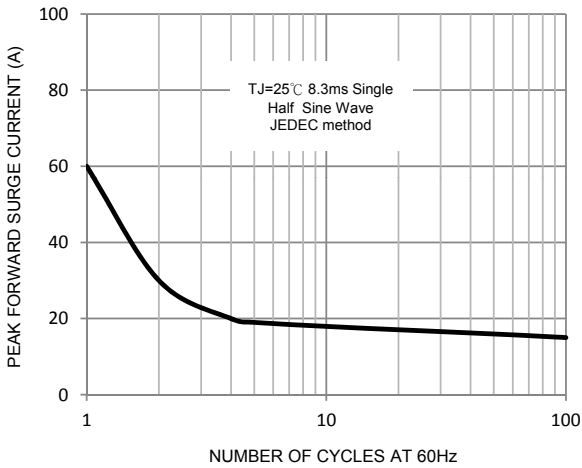


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

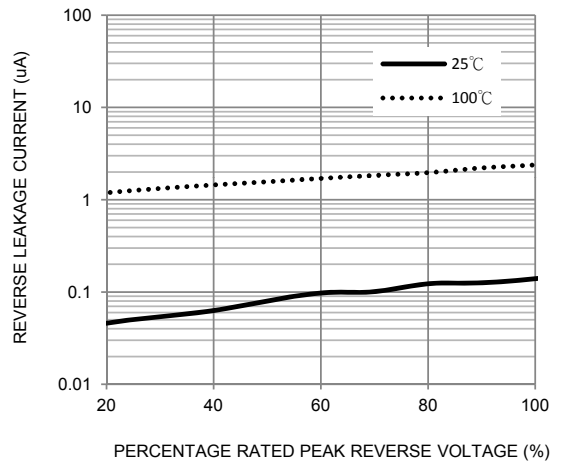


FIG. 5-TYPICAL JUNCTION CAPACITANCE

