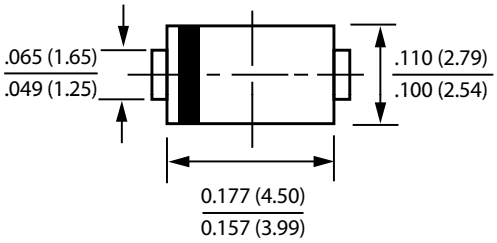
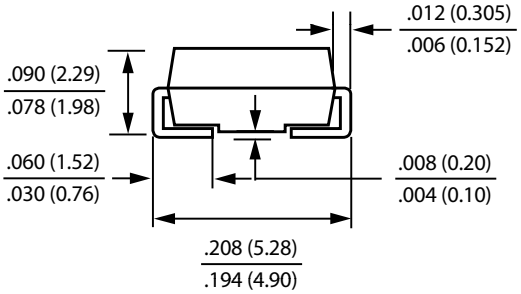
S2AA thru S2WA

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 Date

- 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 IF=2A @ 25°C	V_F	1.1								1.2	1.3		V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°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.

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

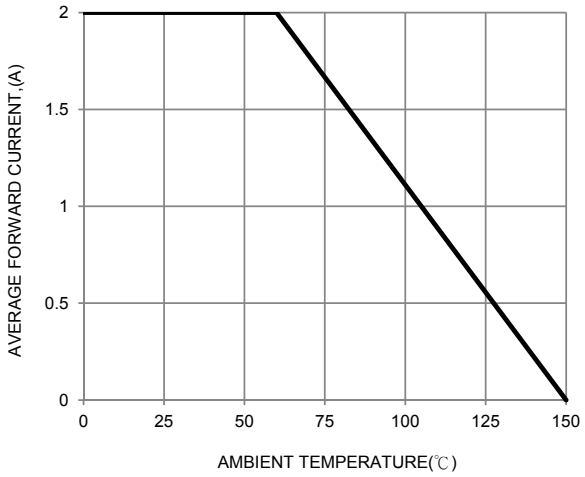

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

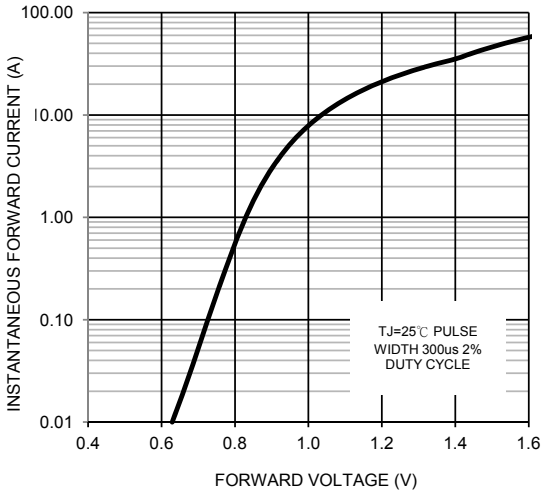

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

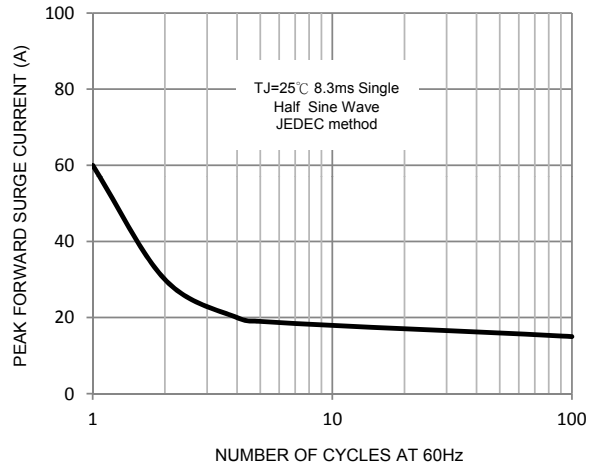

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

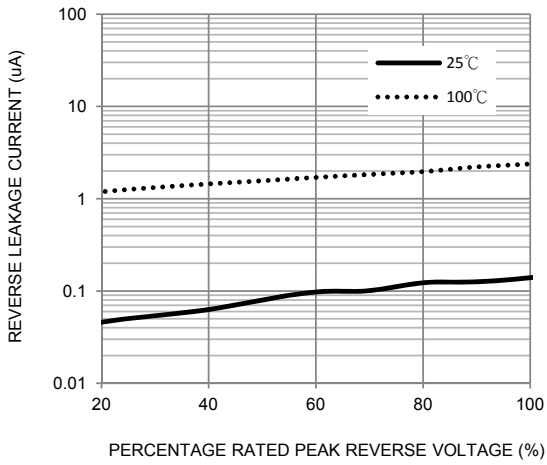

FIG. 5-TYPICAL JUNCTION CAPACITANCE