



**Surface Mount Glass  
Fast Recovery Rectifier  
Voltage 50 to 1000Volts Current 1.0Amperes**



**FEATURES**

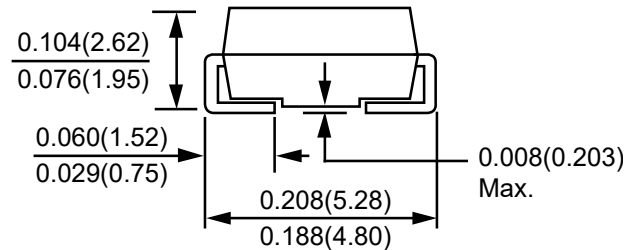
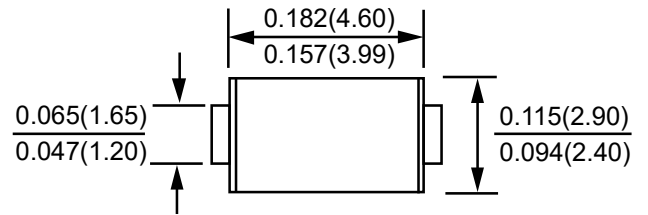
- Fast switching for high efficiency
- Low Power Loss,High Efficiency
- High current capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- AEC-Q101 qualified

**MECHANICAL DATA**

- Case : DO-214AC (SMA)
- Terminals : Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity : Cathode Band or Cathode Notch
- Mounting Position : Any

SMA/DO-214AC

Unit:inch(mm)



**Maximum Ratings (TA=25°C unless otherwise noted)**

Parameter	Symbol	RS1A-A	RS1B-A	RS1D-A	RS1G-A	RS1J-A	RS1K-A	RS1M-A	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	$I_F$	1							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage IF=1A	$V_F$	1.3							V
Maximum DC Reverse Current @ TC=25°C at Rated DC Blocking Voltage @ TC=100°C	$I_R$	5 150							uA
Maximum Reverse Recovery Time (NOTE 1)	$t_{rr}$	150			250		500		ns
Typical Junction Capacitance (NOTE 2)	$C_J$	12							pF
Typical Thermal Resistance	$R_{\theta JL}$	32							°C/W
Operating Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

NOTES :

- 1.Reverse recovery test conditions :  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ .
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

# DEVICE CHARACTERISTICS

## RS1A-A THRU RS1M-A

AVERAGE FORWARD RECTIFIED CURRENT, (A)

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

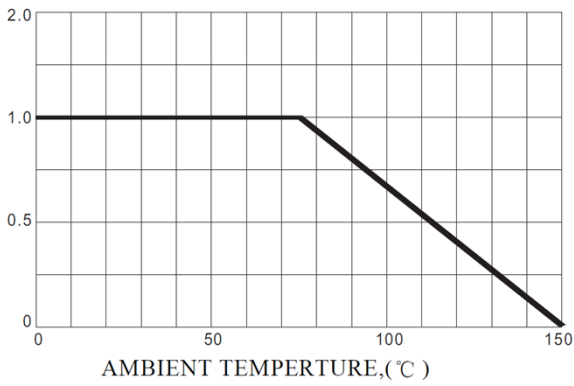
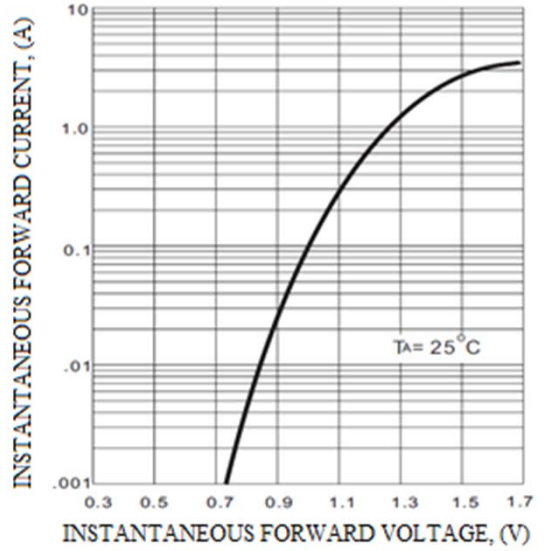
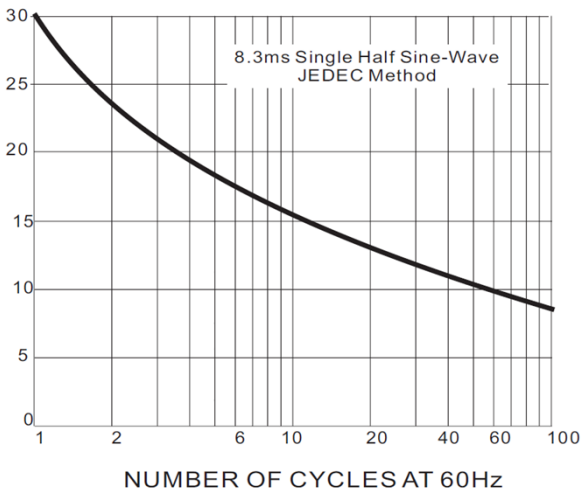


FIG.2 TYPICAL FORWARD CHARACTERISTICS



PEAK FORWARD SURGE CURRENT, (A)

FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT



CAPACITANCE, (pF)

FIG.4 TYPICAL JUNCTION CAPACITANCE

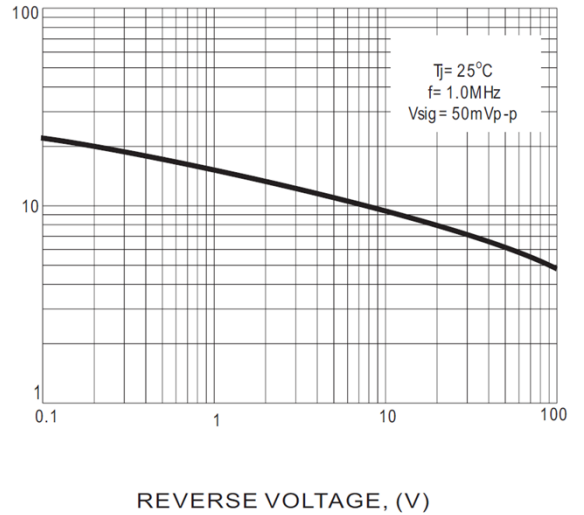


FIG.5 TYPICAL REVERSE CHARACTERISTICS

