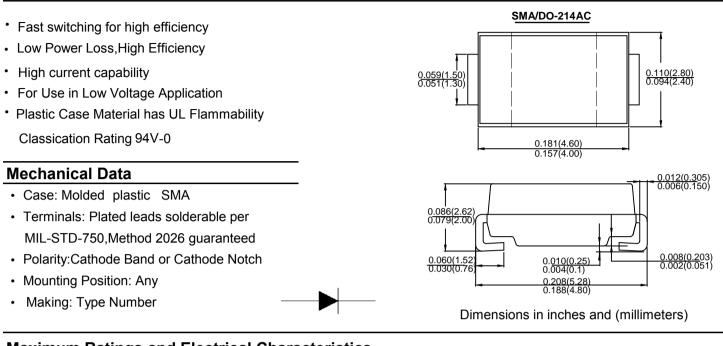


# **RS1A THRU RS1M**

#### **1.0AMP SURFACE MOUNT GLASS FAST RECOVERY RECTIFIER**

#### Features



### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Average Rectified Output Current @T∟ =100°C	IF(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ifsm	30							A
Rating for fusing (t<8.3ms)	l <sup>2</sup> t	3.74							A²s
Forward Voltage @IF=1.0A	$V_{FM}$	1.3							V
Peak Reverse Current @T <sub>A</sub> =25 °C	5.0								
At Rated DC Blocking Voltage@T <sub>A</sub> =125°C	I <sub>R</sub>	200							uA
Maximum Reverse Recovery Time (Note1)	Trr		150			250	50	00	ns
Typical Junction Capacitance (Note 2)	CJ	12							pF
Typical Thermal Resistance Junction to Ambient(Note 3)	R⊎a R⊎∟		100 32						°C/W
Operating Temperature Range	TJ	-55 to+150							°C
Storage Temperature Range	Tstg	-55 to +150							°C

Note: 1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. 8.0mm<sup>2</sup> (.013mm thick) land areas.



AVERGE FORWARD RECTIFIED CURRENT, (A)

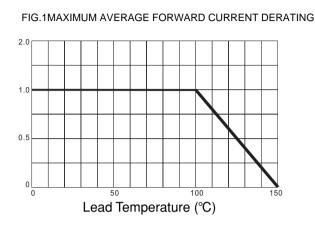
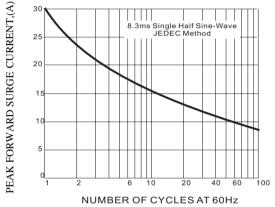
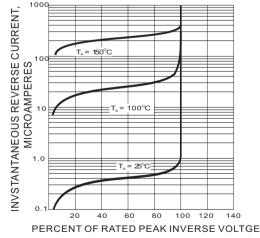


FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT







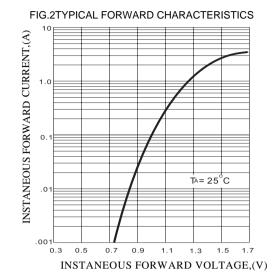
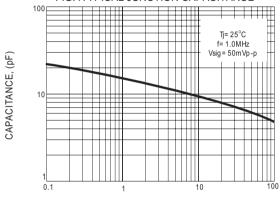
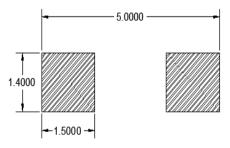


FIG.4TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, (V)

SMA PAD LAYOUT





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