

RS1A THRU RS1M

SURFACE MOUNT FAST RECOVERY GLASS PASSIVATED RECTIFIERS

FEATURES:

- Plastic package has Underwriters
- Flammability Classification 94V-0
- For surface mounted applications in order to optimize board space
- Low profile package
- Built-in strain relief, ideal for automated placement
- Fast switching for high efficiency
- Glass passivated chip junction
- High temperature soldering :
250 °C /10 seconds at terminals

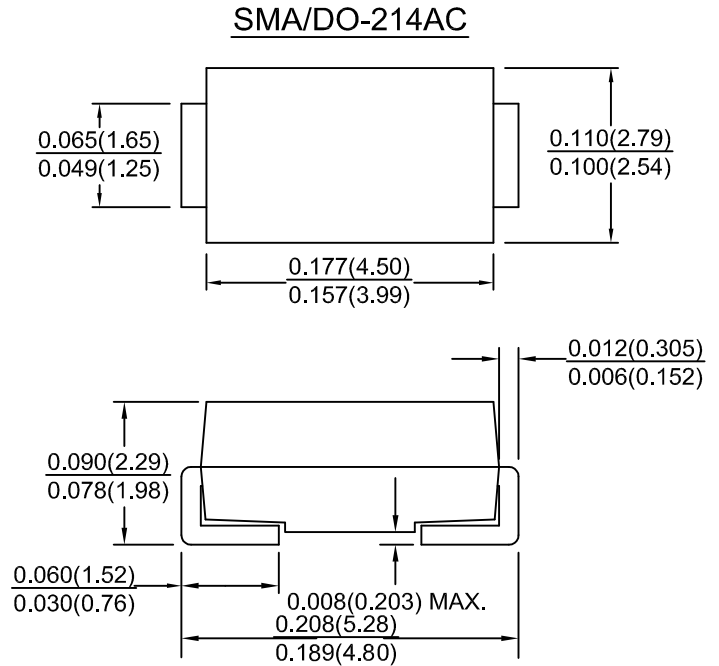
MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic over passivated chip

Terminals: Solder plated, solderable perMIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight:0.064 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temp. unless otherwise specified.

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

For capacitive load, derate current by 20 %.

Characteristic	Symbol	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRRMS	35	70	140	280	420	560	7000	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T _L = 55 °C	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	1.30							Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 200							μA
		T _a =25 °C T _a =125 °C							
Maximum reverse recovery time (Note1)	t _{rr}	150			250		500		nS
Typical junction capacitance (Note2)	C _J	15							pF
Typical thermal resistance	R _{th-JL}	20							°C / W
Operating and storage temperature range	T _J , T _{stg}	-65 to +150							°C

NOTES:

- (1) Reverse recovery test condition : I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from Junction to lead mounted on P.C.B. with 0.2x0.2"(5.0x5.0mm) copper Pad areas

RATINGS AND CHARACTERISTIC CURVES RS1A THRU RS1M

FIG.1 - FORWARD CURRENT DERATING CURVE

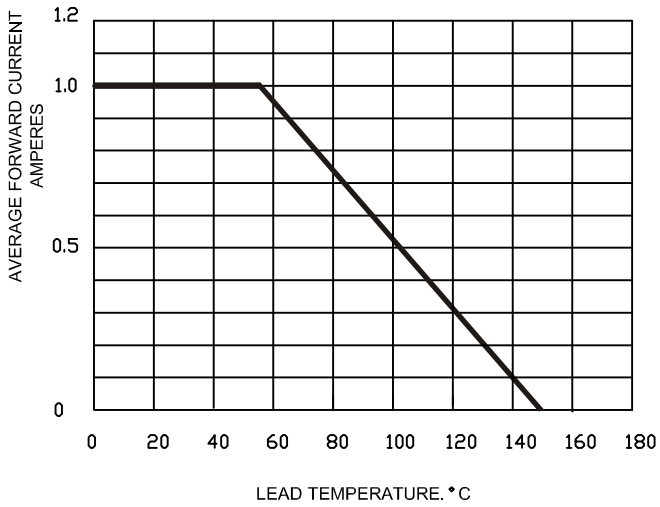


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

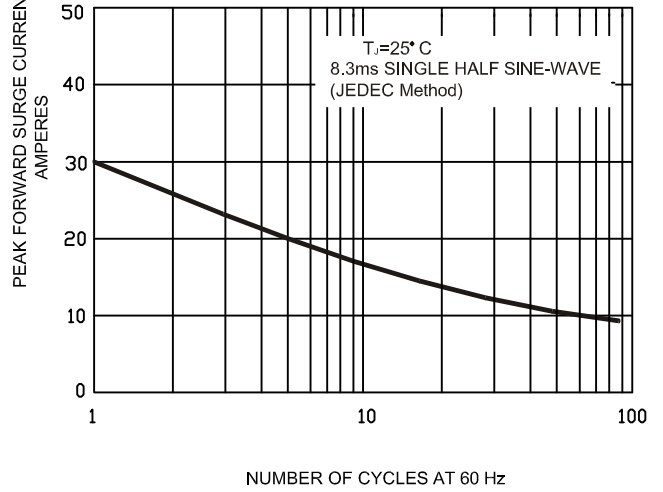


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

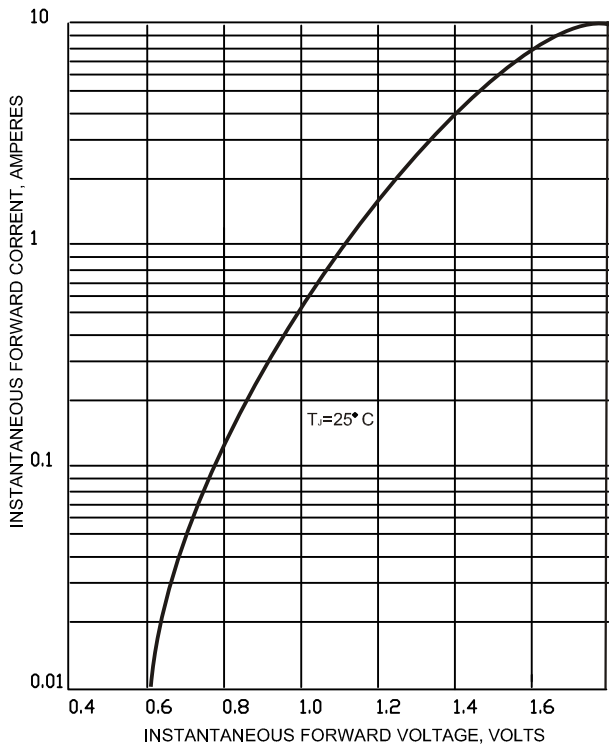


FIG.4-TYPICAL REVERSE CHARACTERISTICS

