

RS2A-RS2M

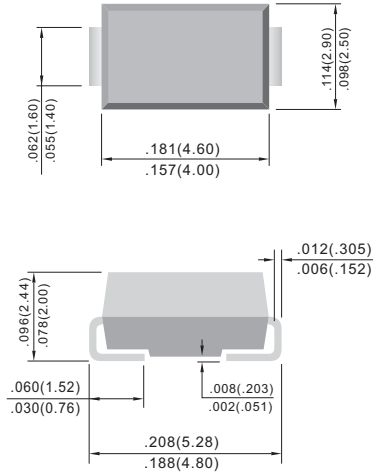
SURFACE MOUNT FAST RECOVERY RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT 2.0 Amperes



SMA/DO-214AC

Unit: inch (mm)



FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Fast Recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Indicated by cathode band
 Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	UNITS
Maximum Recurrent 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 Rectified Current at TL=90 °C	I _O	2.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	50							A
Maximum Forward Voltage at 2.0A	V _F	1.3							V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=125°C	I _R	5.0 150							uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	150					250	500	ns
Maximum Junction capacitance (Note 2)	C _T	30							pF

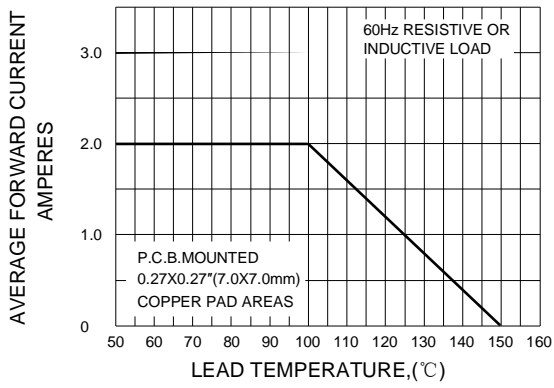
TYPICAL THERMAL RESISTANCE

PARAMETER	SYMBOL	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	UNITS
Typical Junction Resistance(Note 3)	R _{θJA} R _{θJL}	100 32							°C / W
Operating Junction and Storage Temperature Rating	T _J , T _{STG}	-55 TO +150							°C

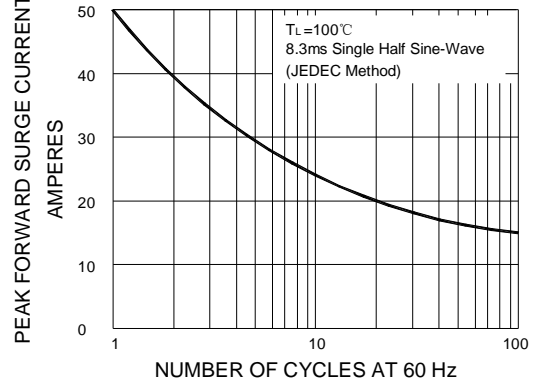
NOTES:1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
 2. Measured at 1 MHz and applied V_r = 4.0 volts.
 3. 8.0 mm² (.013mm thick) land areas.

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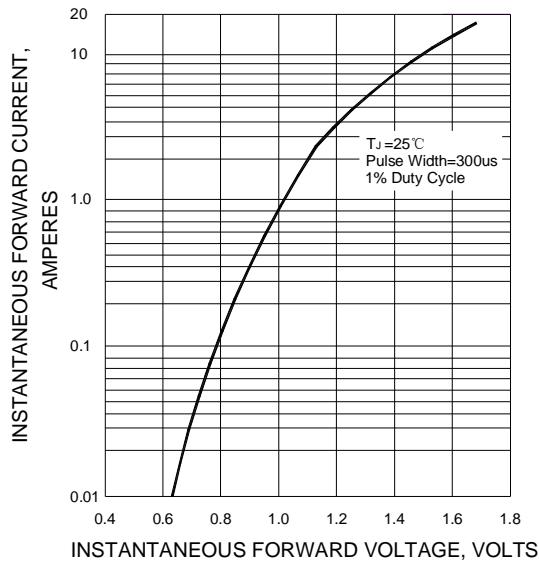
F1G.1-FORWARD CURRENT DERATING CURVE



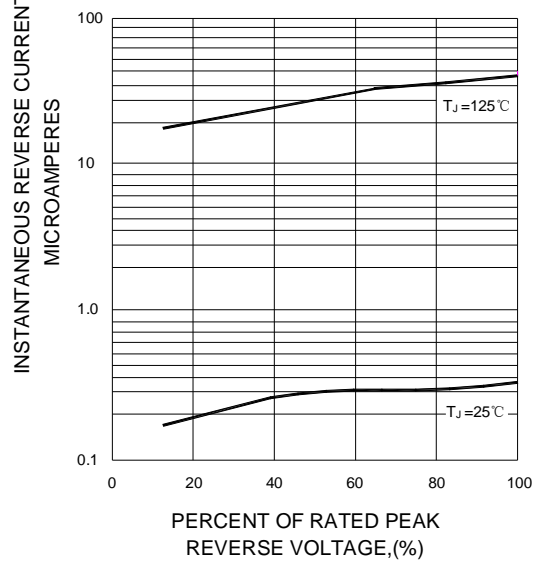
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE

