

RS2A THRU RS2M

FAST RECOVERY RECTIFIER

REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 2.0 AMPERE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass Passivated Die Construction
- For surface mounted applications
- Low profile package
- Easy pick and place
- Built-in strain relief
- Fast Recovery times for high efficiency
- Suffix " H " indicated Halogen-free part, ex.RS2AH

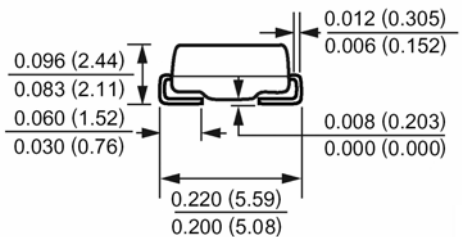
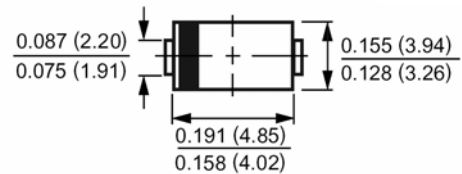
MECHANICAL DATA

Case : Molded plastic, DO-214AA(SMB)

Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity : Color band denotes cathode end

DO214-AA(SMB)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Parameter	Symbols	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	Units	
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current	$I_{(AV)}$	2.0							Amp	
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0							Amp	
Maximum Forward Voltage at 2.0A DC and 25°C	V_F	1.3							Volts	
Maximum Reverse Current at $T_J=25^\circ C$ at Rated DC Blocking Voltage $T_J=125^\circ C$	I_R	5.0 200							uAmp	
Typical Junction Capacitance (Note 1)	C_J	30							pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20.0							°C/W	
Maximum Reverse Recovery Time (Note 3)	T_{RR}	150				250		500		nS
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C	

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

3- Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{RR}=.25A$.

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RATINGS AND CHARACTERISTIC CURVES

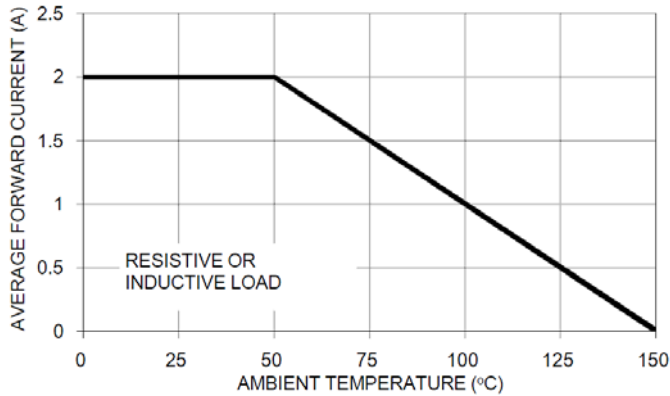


FIG. 1 FORWARD CURRENT DERATING CURVE

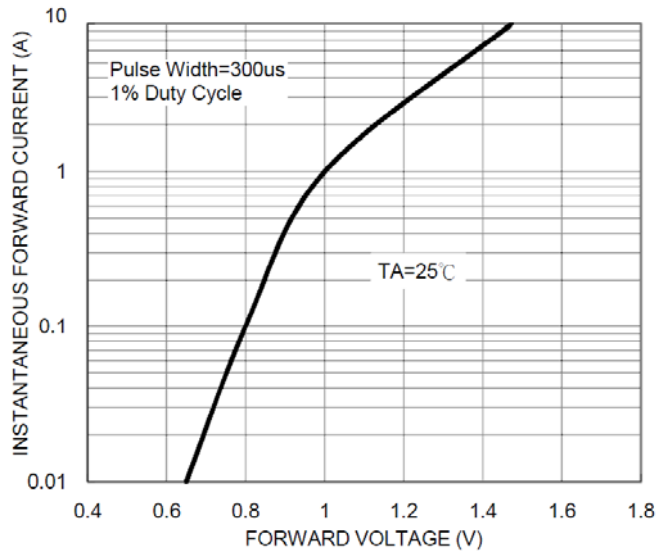


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

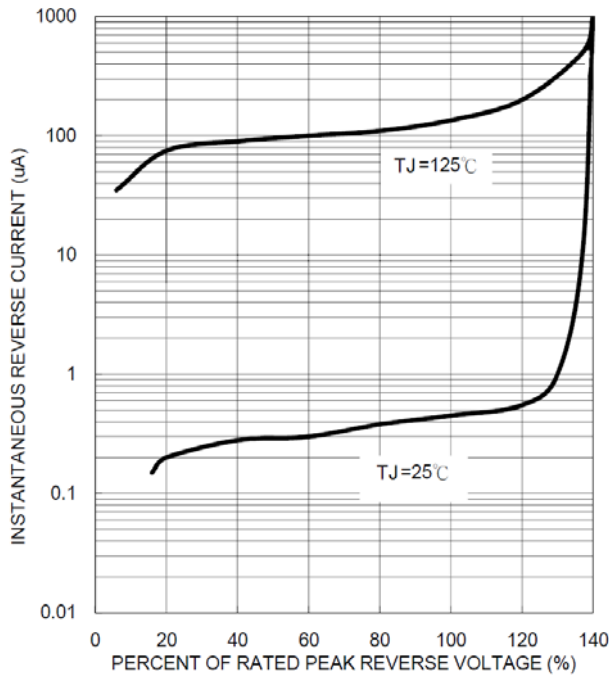


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

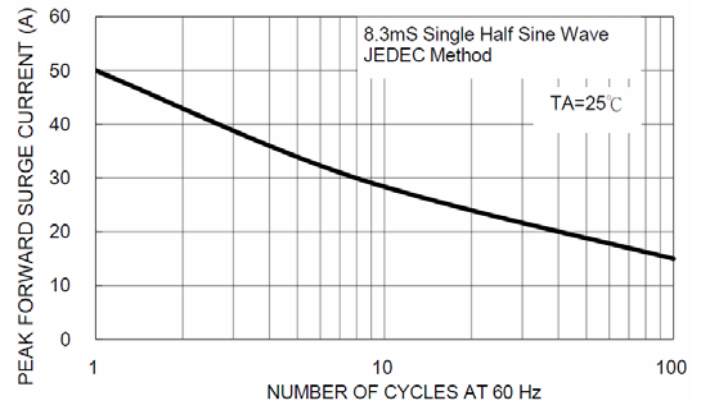
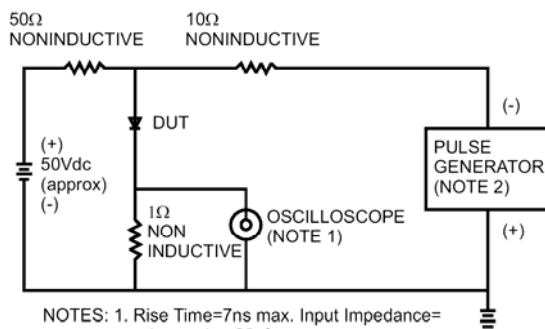


FIG. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Source Impedance=50 ohms

