



RS2A THRU RS2M

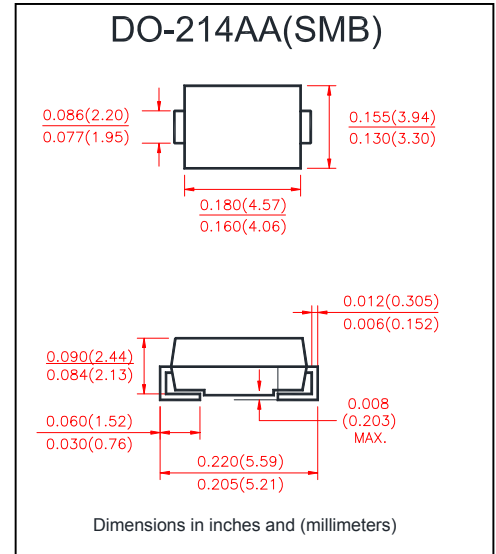
VOLTAGE RANGE
50 to 1000 Volts
CURRENT
2.0 Ampere

Features

- Plastic package has underwrites laboratory flammability
- Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Fast switching for high efficiency
- Glass passivated chip junction
- High temperature soldering
- 250°C/10 second at terminals

Mechanical Data

- Case: JEDED DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, Solderable per MIL-STD-750, method 2026
- Polarity: Laser band denote cathode band
- Weight: 0.0034 ounce, 0.098 grams



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%

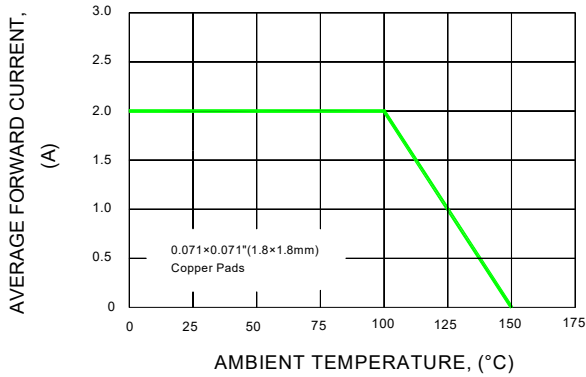
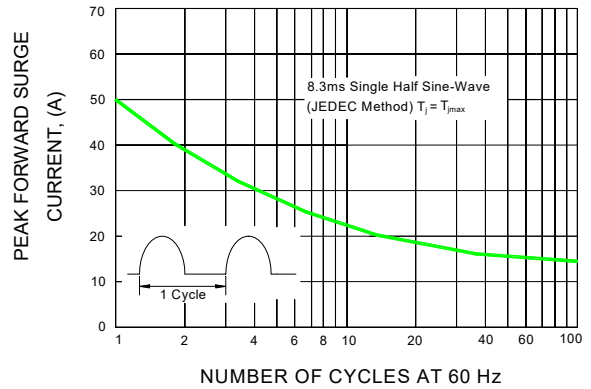
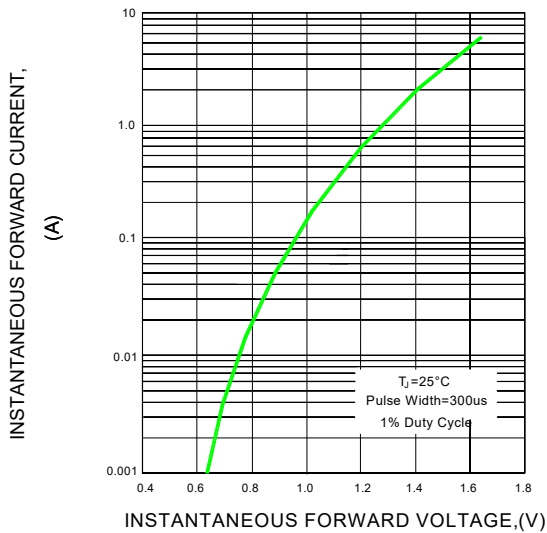
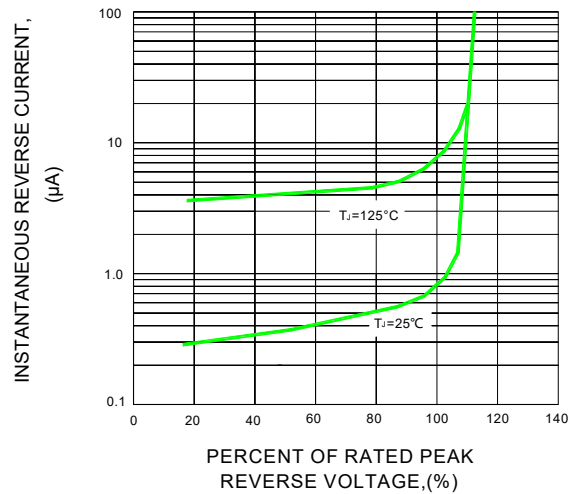
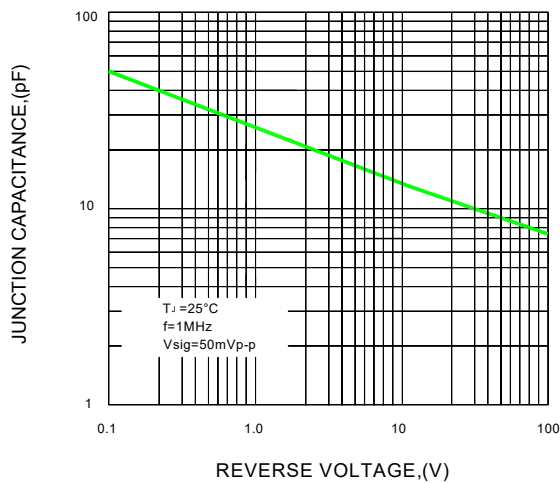
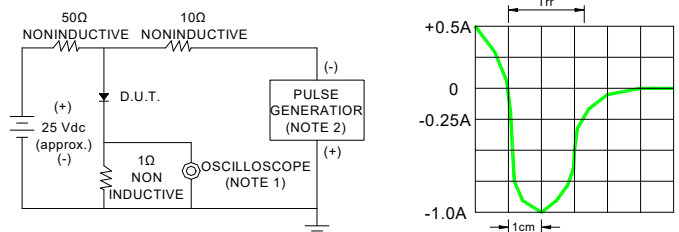
TYPE NUMBER	SYMBOLS	RS 2A	RS 2B	RS 2D	RS 2G	RS 2J	RS 2K	RS 2M	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.30							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0							μA
	$T_A = 100^\circ\text{C}$	50							
Typical Reverse Recovery Time at $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$	T_{RR}	150				250	500		nS
Typical Junction Capacitance (Note 1)	C_J	20				17			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	53							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	16							
Typical Thermal Resistance (Note 2, 3)	$R_{\theta JC}$	8.5							
Operating Junction Temperature Range	T_J	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at 0.3×0.3" (8.0 × 8.0mm) copper pad areas.
3. Thermal resistance from junction to case.



Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT****FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****FIG.4-TYPICAL REVERSE CHARACTERISTICS****FIG.5-TYPICAL JUNCTION CAPACITANCE****FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**

NOTES : 1.Rise Time=7ns max. Input Impedance= 1 magohm. 22pF
 2.Rise time=10ns max. Source Impedance= 50 ohms

SET TIME BASE FOR 50/100ns/cm