

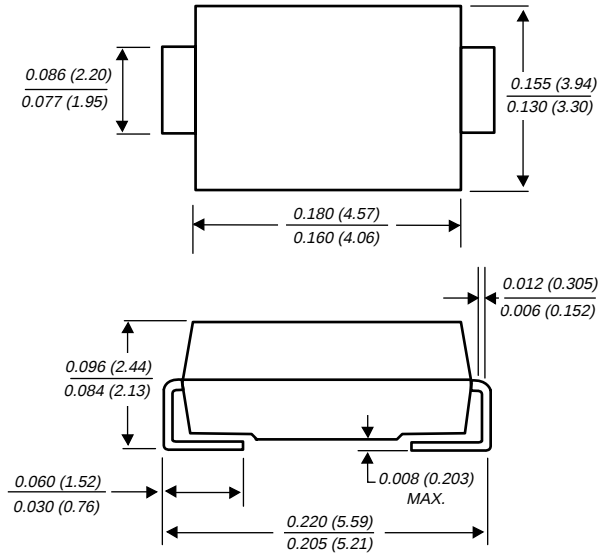
RS2A THRU RS2K

SURFACE MOUNT FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 800 Volts

Forward Current - 1.5 Amperes

DO-214AA MODIFIED J-BEND



Dimensions in inches and (millimeters)

FEATURES

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



MECHANICAL DATA

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

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

Polarity: Color band denotes cathode band end

Weight: 0.003 ounce, 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	UNITS
Device marking code		RA	RB	RD	RG	RJ	RK	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	Volts
Maximum average forward rectified current at TL=100°C	I(AV)	1.5						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50.0						Amps
Maximum instantaneous forward voltage at 1.5A	VF	1.30						Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5.0 200.0						µA
Maximum reverse recovery time (NOTE 1)	trr	150			250		500	ns
Typical junction capacitance (NOTE 2)	CJ	50.0						pF
Typical thermal resistance (NOTE 3)	RθJA RθJL	55.0 18.0						°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to 150						°C

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient and junction to lead
P.C.B. mounted on 0.27 x 0.27" (7.0 x 7.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES RS2A THRU RS2K

FIG. 1 - FORWARD CURRENT DERATING CURVE

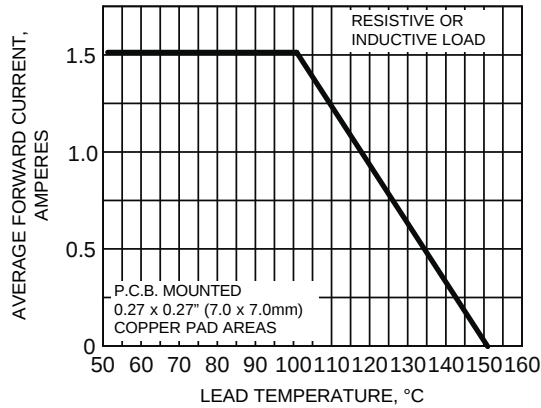


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

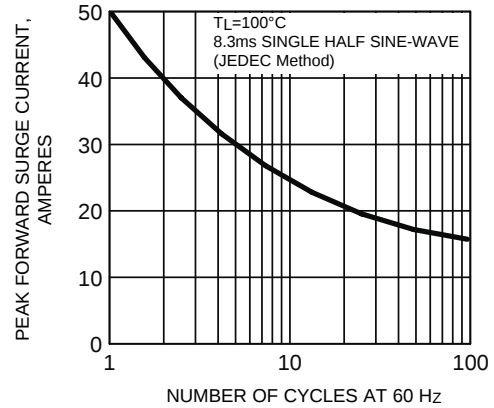


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

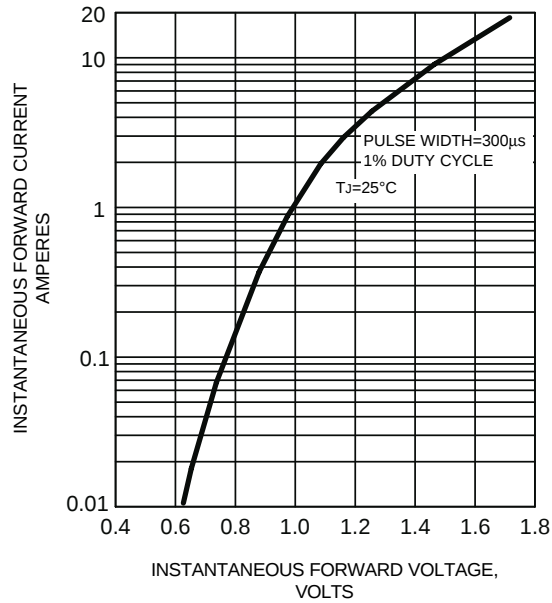


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

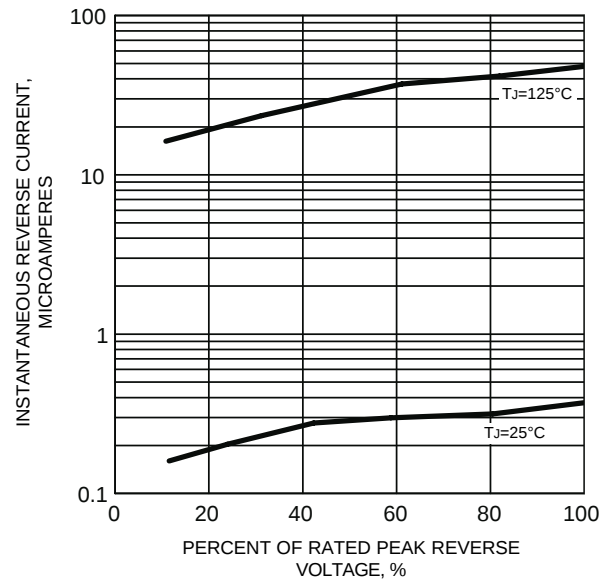


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

