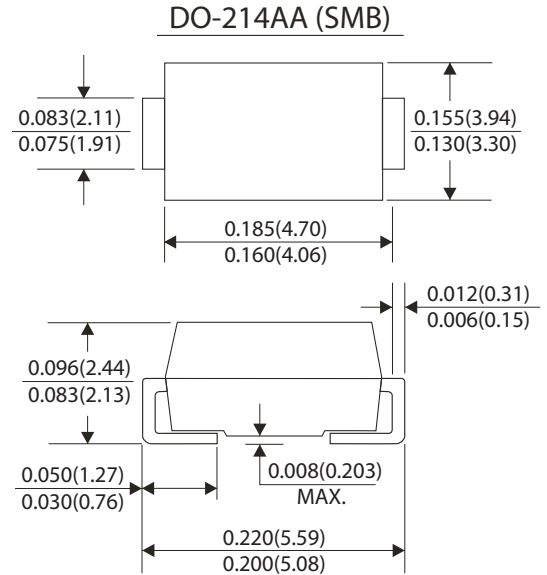


### Features

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

### Mechanical Data

- Case : JEDEC SMB(DO-214AA) molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram



### 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 by 20%)

	Symbols	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	Volts
Maximum average forward rectified current at T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	1.5						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50.0						Amps
Maximum instantaneous forward voltage at 1.5A	V <sub>F</sub>	1.30						Volts
Maximum reverse current at rated voltage	T <sub>A</sub> =25 °C	5.0						µA
	T <sub>A</sub> =125 °C	200						
Maximum reverse recovery time (Note 1)	T <sub>rr</sub>	150			250	500	nS	
Typical thermal resistance (Note 3)	R <sub>θJL</sub>	18.0						°C/W
	R <sub>θJA</sub>	55.0						
Typical junction capacitance (Note 2)	C <sub>J</sub>	50.0						pF
Operating junction and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-55 to +150						°C

#### Notes:

- (1) Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.
- (3) Thermal resistance from junction to ambient and junction to lead mounted on PCB mounted on 0.27 × 0.27"(7.0 × 7.0mm) copper pad areas



# RATINGS AND CHARACTERISTIC CURVES RS2A THRU RS2K

FIG.1-FORWARD CURRENT DERATING CURVE

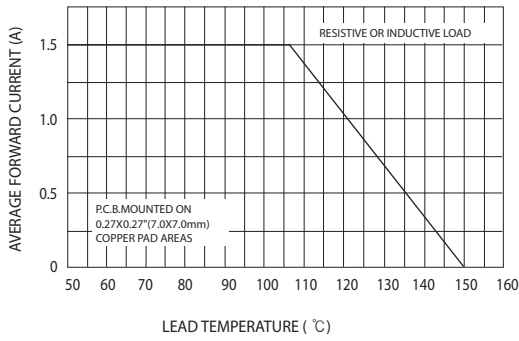


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

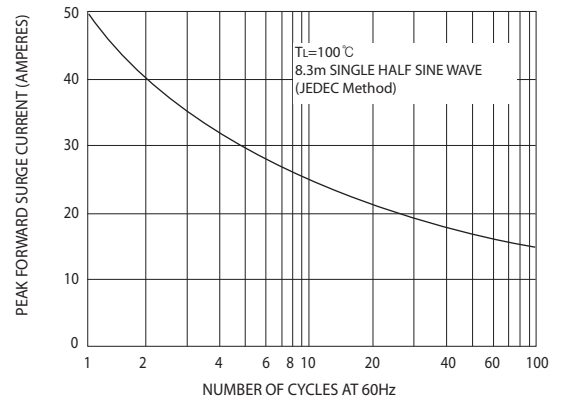


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

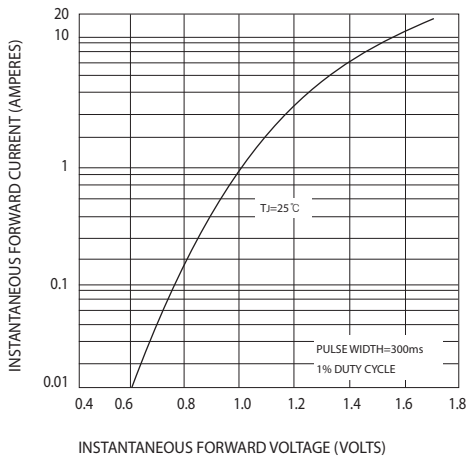


FIG.4-TYPICAL JUNCTION CAPACITANCE

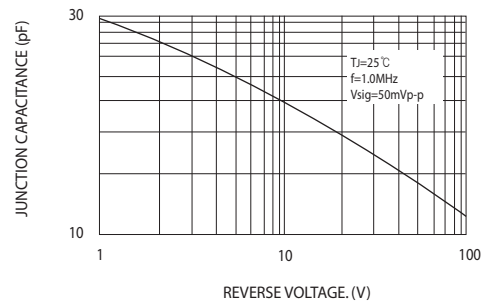


FIG.5-TYPICAL REVERSE CHARACTERISTICS

