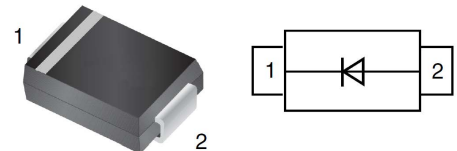


Fast Recovery Rectifier in DO-214AA/SMB

Features

- Glass passivated junction chip
- For surface mounted application
- Low forward voltage drop
- Low profile package
- Built-in strain relief, ideal for automated placement
- Moisture sensitivity: level 1, per J-STD-020
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
Halogen-free according to IEC 61249-2-21 definition



Applications

Rectifier application

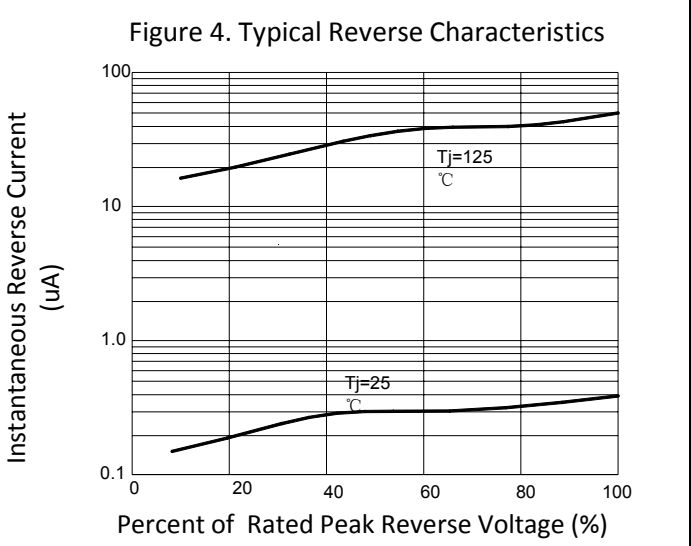
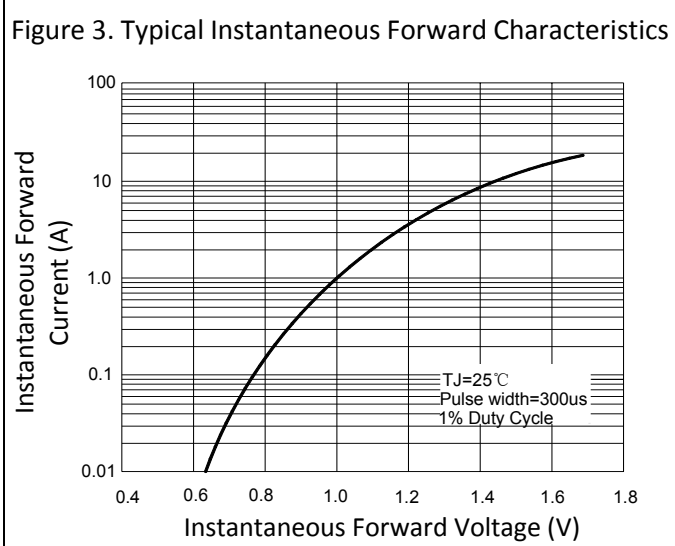
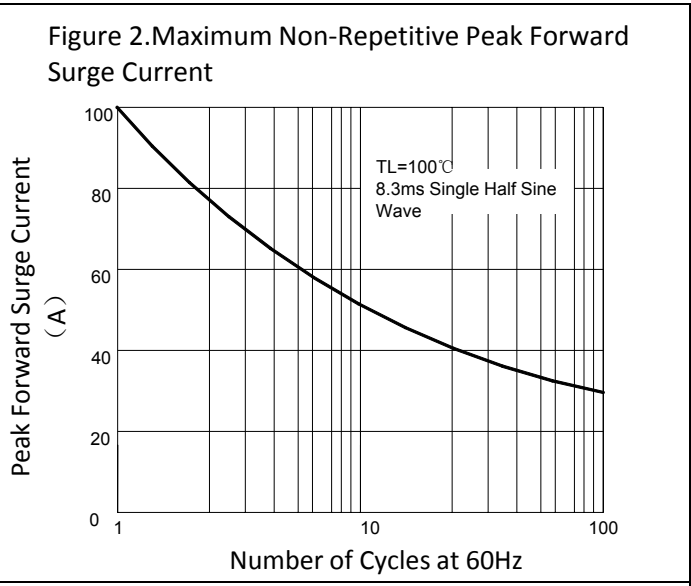
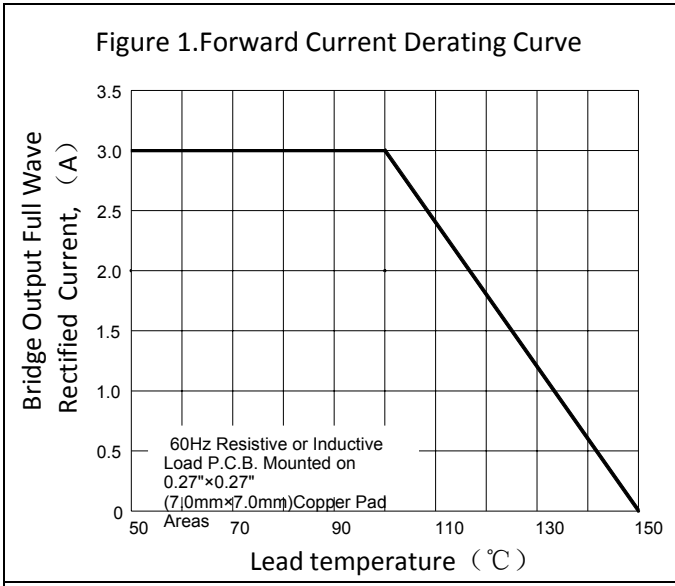
Electrical Characteristics

($T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

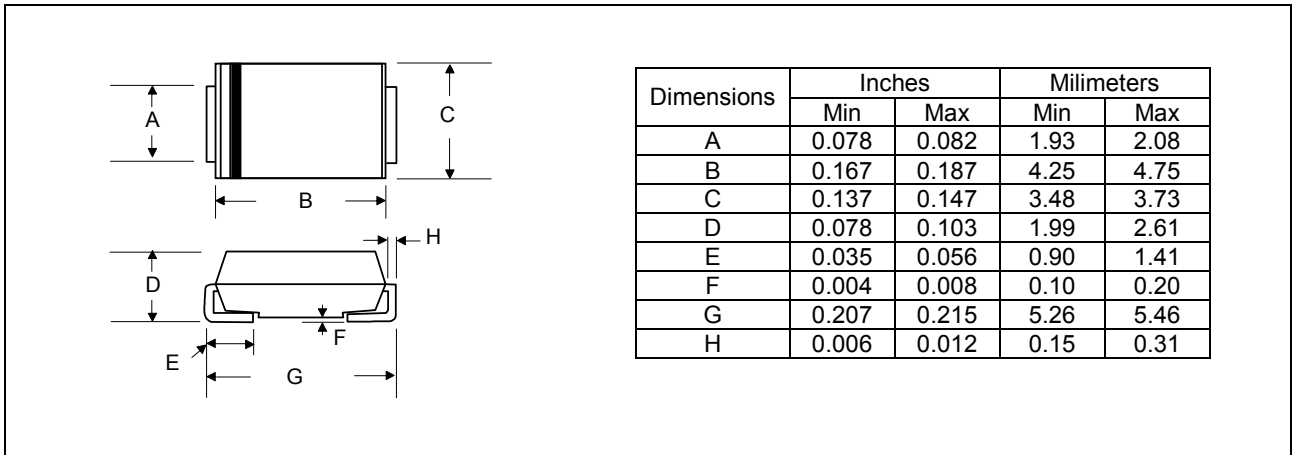
Parameter	Symbols	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current $T_L=100^\circ\text{C}$	$I_{F(AV)}$	3.0							Amps
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) (JEDEC Method)	I_{FSM}	100.0							Amps
Maximum Instantaneous Forward Voltage at 2A	V_F	1.35							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A=25^\circ\text{C}$	5.0						μA
		@ $T_A=125^\circ\text{C}$	200						
Typical Reverse Recovery Time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$	T_{rr}	150			250	500		nS	
Typical Junction Capacitance at 4.0V, 1MHz	C_J	50							pF
Typical Thermal Resistance(Note 1)	R_{THJA}	55							$^\circ\text{C/W}$
	R_{THJL}	18							
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. Thermal resistance from junction to ambient and from junction to lead frame P.C.B. mounted on 0.3×0.3"(8.0×8.0mm) copper pad areas.

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
RS3A Thur RS3M	DO-214AA/SMB	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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