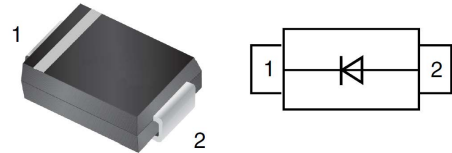


## Fast Recovery Rectifier in DO-214AB/SMC

### 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
- Halogen-free according to IEC 61249-2-21 definition



### Mechanical Data

- **Case:** JEDEC DO-214AB(SMC)molded plastic  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

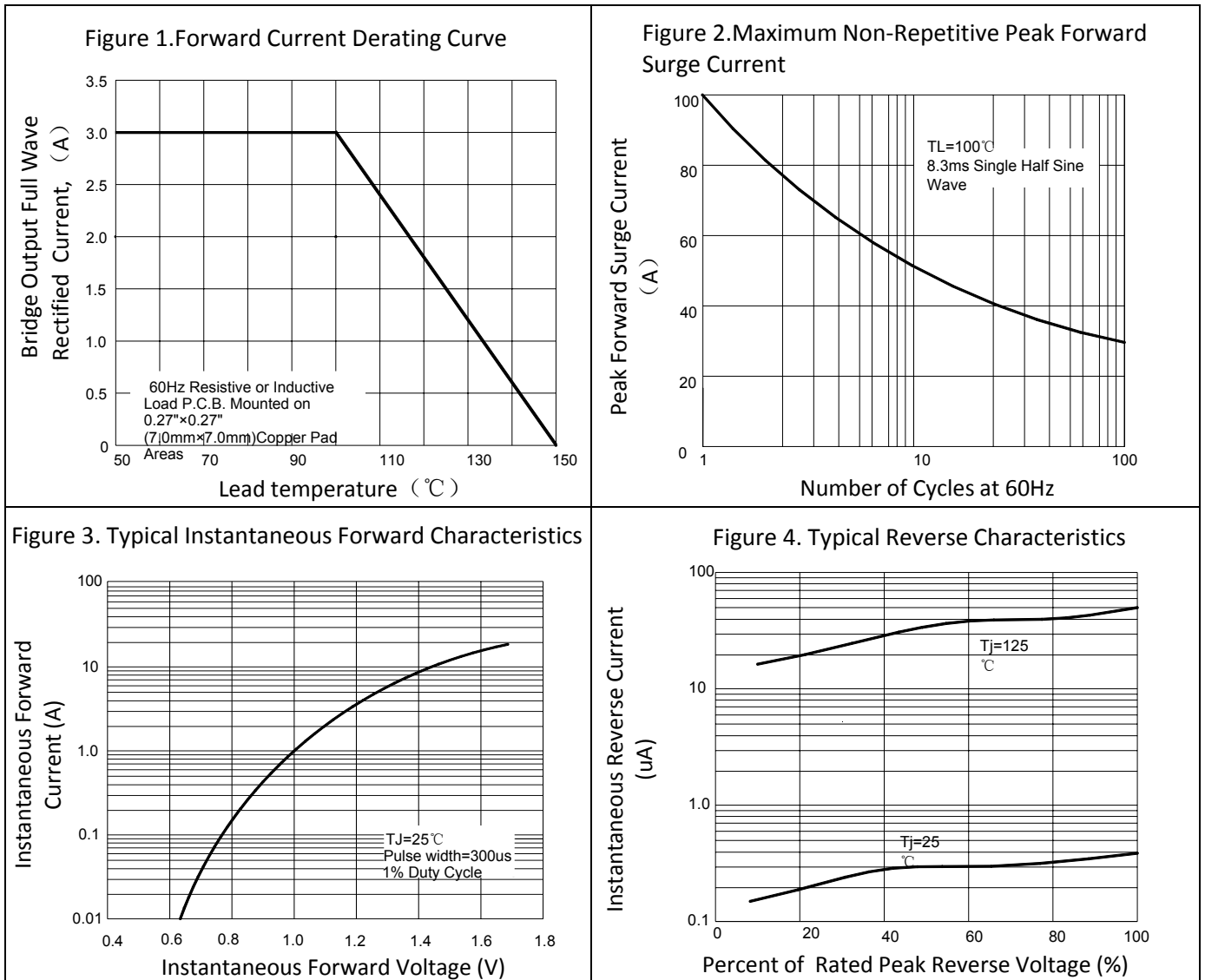
### Electrical Characteristics

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

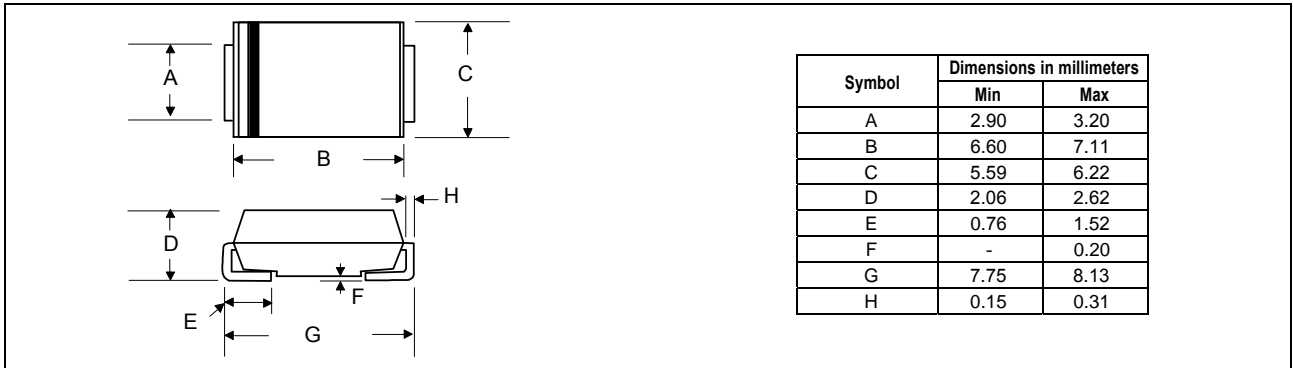
Parameter	Symbols	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $T_L=100\text{ °C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100.0							A
Maximum Instantaneous Forward Voltage at 2A	$V_F$	1.35							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A=25\text{ °C}$	5.0							$\mu\text{A}$
	@ $T_A=125\text{ °C}$	200							$\mu\text{A}$
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							$\text{°C/W}$
	$R_{THJL}$	18							
Operating Junction Temperature Range	$T_J$	-55 to +150							$\text{°C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$\text{°C}$

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.

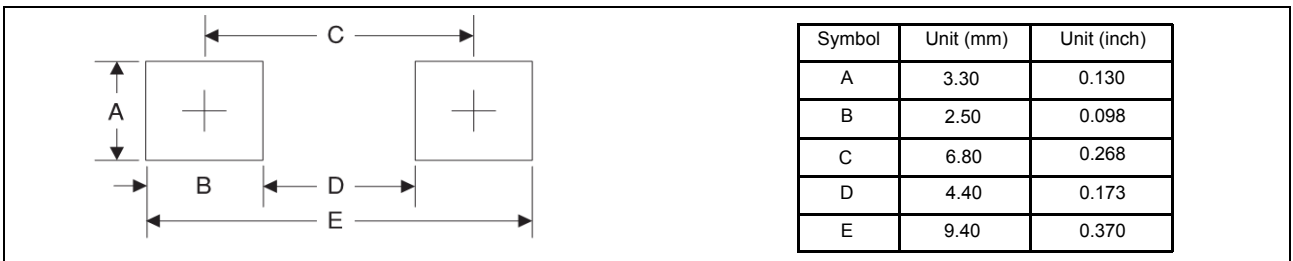
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



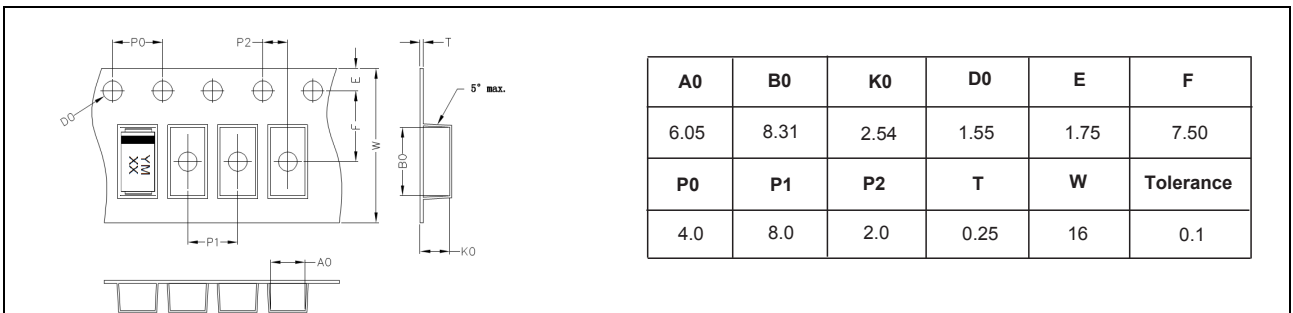
### Package Dimensions



### PAD Dimensions



### Packing Information



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
RS3A Thru RS3M	DO-214AB/SMC	Tape and reel	3000pcs / reel	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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