

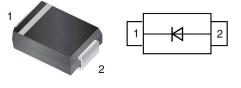
### **RS3A thur RS3M**

### **CREATEK Microelectronics**

### 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<sub>A</sub> = 25 °C unless otherwise specified)

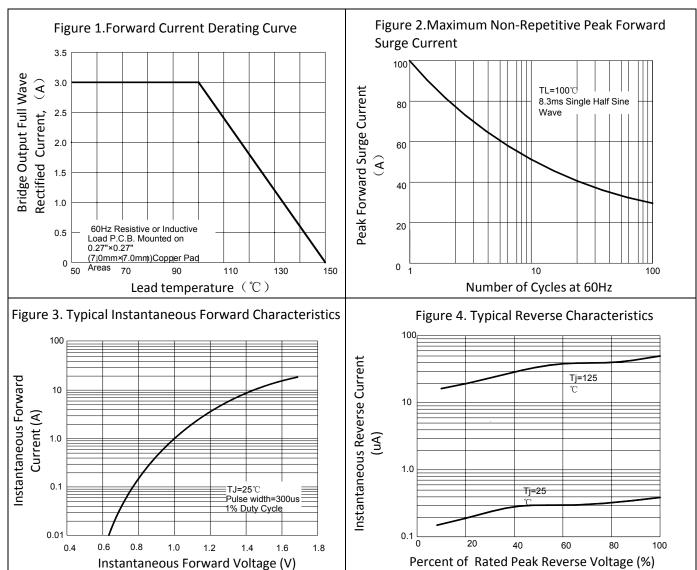
Parameter	Symbols	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $T_L$ =100°C	I <sub>F(AV)</sub>				3.0				А
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM				100.0				А
Maximum Instantaneous Forward Voltage at 2	A V <sub>F</sub>				1.35				V
Maximum DC Reverse Current @ T <sub>A</sub> =25°0		5.0						uA	
at Rated DC Blocking Voltage	C I <sub>R</sub>	200			uA				
Typical Reverse Recovery Time	T <sub>rr</sub>	150 250 500			00	nS			
at I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A Typical Junction Capacitance at 4.0V, 1MHz	CJ	50					pF		
	R <sub>THJA</sub>	55						°C/W	
Typical Thermal Resistance(Note 1)	R <sub>THJL</sub>	18							
Operating Junction Temperature Range	TJ	-55 to +150					°C		
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C		

Notes: 1. Thermal resistance form 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.

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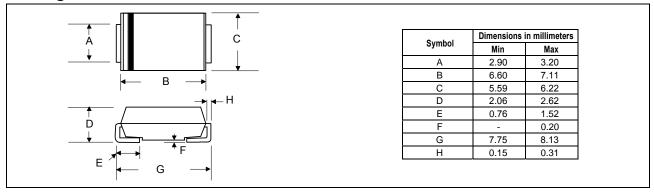
### Typical Characteristics (T<sub>amb</sub> = 25 °C unless otherwise specified)



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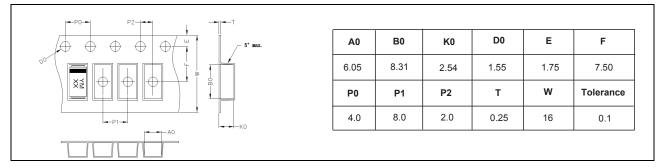
### **Package Dimensions**



#### **PAD Dimensions**



### **Packing Information**



### **Ordering information**

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

### **Revision history**

Date	Revision	Changes
23-May-2012	1.0	Initial release
18-Dec2019	2.0	Update

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