

# RS07B-M

## Surface Mount Fast Rectifiers

### Features

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering:
- 250°C/10 seconds at terminals
- RoHS compliant package

### Mechanical Data

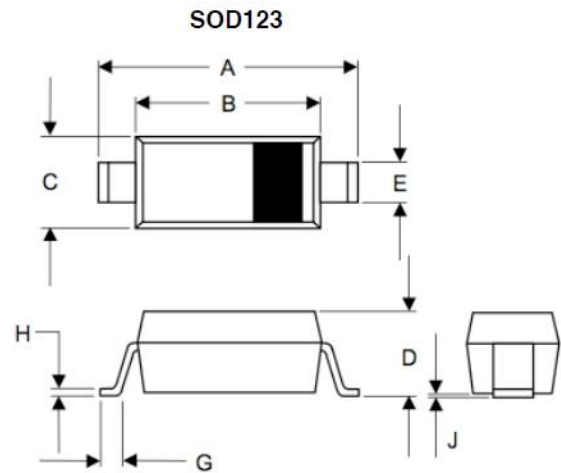
- Case: SOD-123 Molded plastic
- Epoxy: UL94V-O rate flame retardant
- Lead: Lead Formed for Surface Mount
- Polarity: Color band denotes cathode end
- Mounting position: Any

### Packing & Order Information

3,000/Reel



**RoHS  
COMPLIANT**



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.031	0.30	.78	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	

### Graphic symbol



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.

Single phase, half wave, 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

		RS 07B	RS 07D	RS 07G	RS 07J	RS 07K	RS 07M	Unit
Device marking code		RB	RD	RG	RJ	RK	RM	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum average forward rectified current TA=65 °C (Note 1)	$I_{F(AV)}$	0.7						A

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	RS 07B	RS 07D	RS 07G	RS 07J	RS 07K	RS 07M	Unit	
Device marking code	RB	RD	RG	RJ	RK	RM		
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load TL=25 °C	I <sub>FSM</sub>						20	A
Typical thermal resistance (Note2)	R <sub>θJA</sub>						180	K/W
Maximum reverse recovery time (Note3)	T <sub>rr</sub>			150	250	500	ns	
Operating Temperature Range	T <sub>J</sub>						-55 to +150	°C
Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>						-55 to +150	°C

#### NOTES

1. Averaged over any 20 ms period.
2. Thermal resistance junction to ambient, 6.0 mm 2 copper pads to each terminal.
3. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A

#### ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Min	Typ	Max	Unit
V <sub>F</sub>	Maximum instantaneous (NOTE4) Forward voltage at 0.7A	--	--	1.15	V
I <sub>R</sub>	Maximum DC reverse current @TA=25°C At rated DC blocking voltage @TA=125°C	--	--	10 50	uA
C <sub>j</sub>	Typical junction capacitance (NOTE5)	--	4	--	A

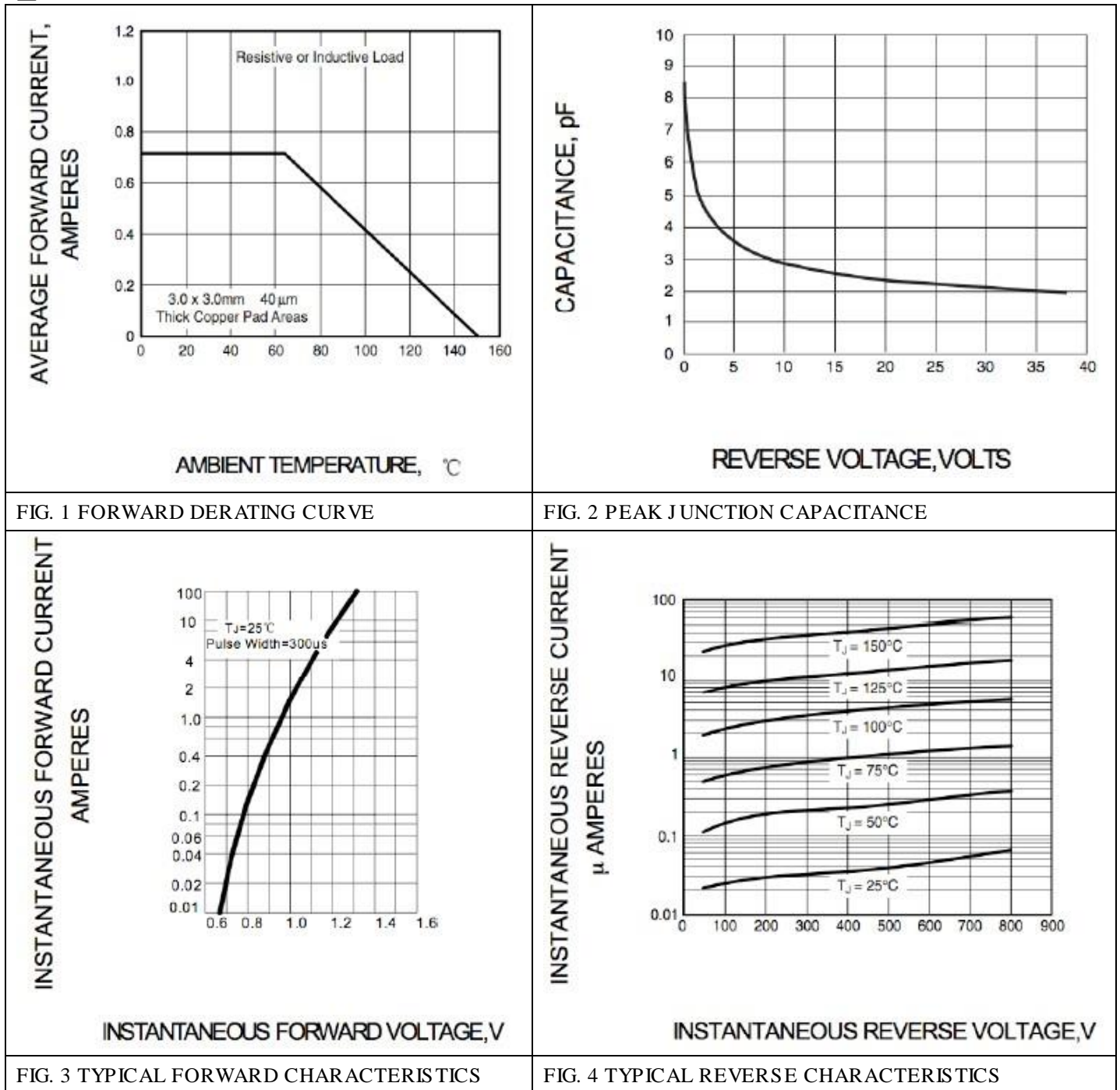
#### NOTES

4. Pulse test: 300µs pulse width, 1% duty cycle.
5. Measured at 1.0MHz and applied average voltage of 4.0V DC.

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#### ■ RATING AND CHARACTERISTIC CURVES



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#### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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