RS07B-M

Surface Mount Fast Rectifiers

Features

- Glass passivated device
- Ideal for surface mouted 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

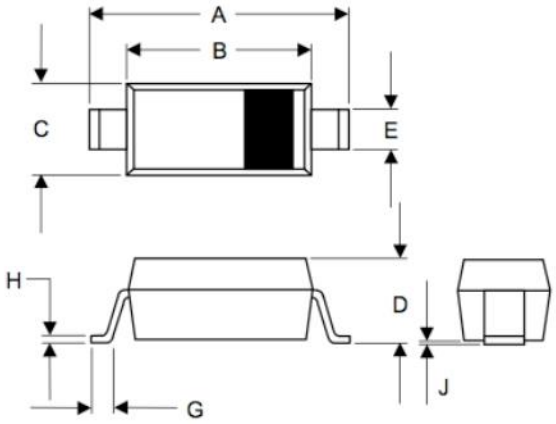
Package type：SOD-123

Packing & Order Information

3,000/Reel

RoHS COMPLIANT

SOD123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	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 specifie.
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 (Note1)	$I_{F(AV)}$	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 forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load TL=25 °C	I_{FSM}	20						A
Typical thermal resistance (Note2)	$R_{\theta JA}$	180						K/W
Maximum reverse recovery time (Note3)	Trr	150			250	500		ns
Operating Temperature Range	T_J	-55 to +150						°C
Storage Temperature Range	T_J,T_{STG}	-55 to +150						°C

NOTES

1.Averaged over any 20 ms period.

2.Thermal resistance junction to ambient, 6.0 mm 2 coppeer pads to each terminal.

3.Measured with IF=0.5A, IR=1A, Irr=0.25A

ELECTRICAL CHARACTERISTICS					
Symbol	Parameter	Min	Typ	Max	Unit
V_F	Maximum instantaneous (NOTE4) Forward voltage at 0.7A	--	--	1.15	V
I_R	Maximum DC reverse current @TA=25°C At rated DC blocking voltage @TA=125°C	--	--	10 50	V
Cj	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

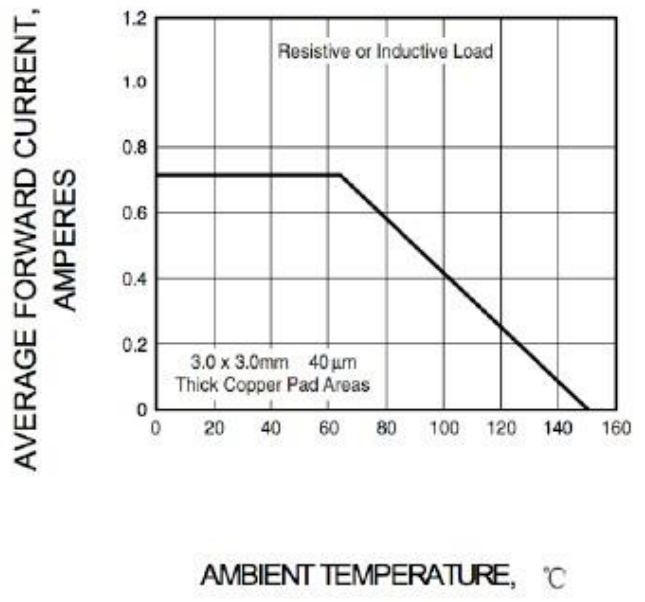

FIG. 1 FORWARD DERATING CURVE

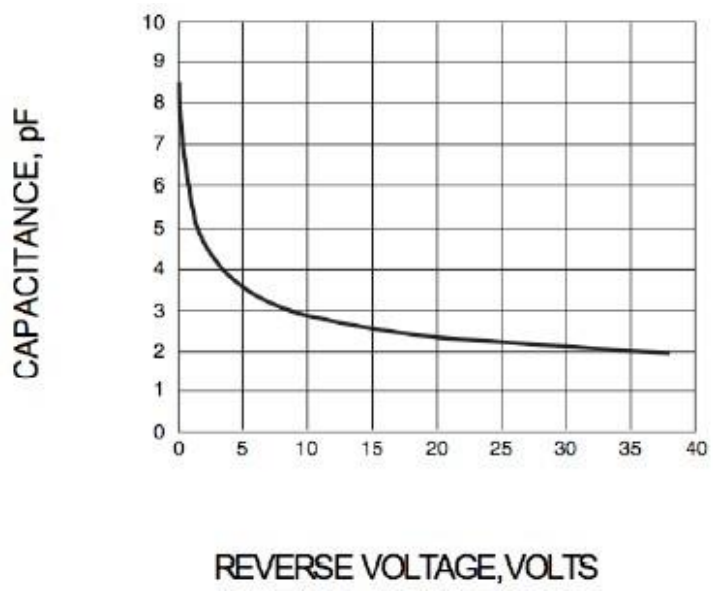

FIG. 2 PEAK JUNCTION CAPACITANCE

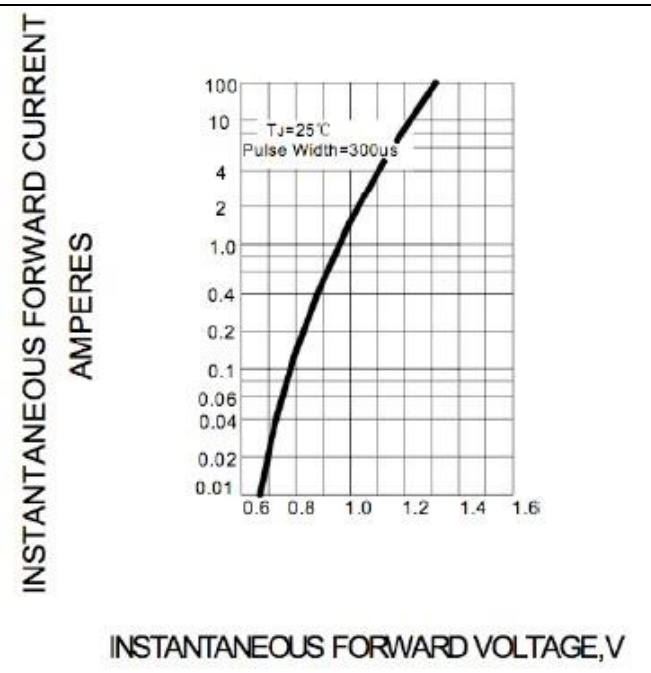

FIG. 3 TYPICAL FORWARD CHARACTERISTICS

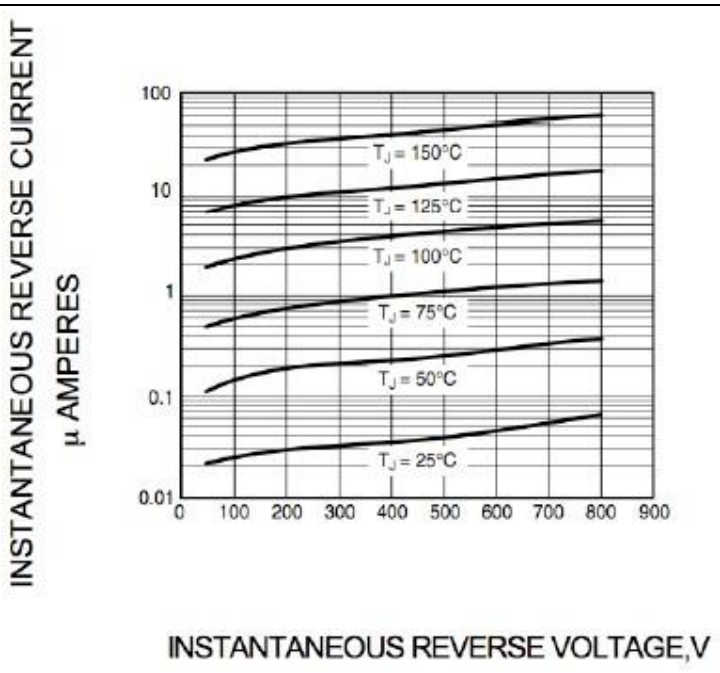

FIG. 4 TYPICAL REVERSE CHARACTERISTICS

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