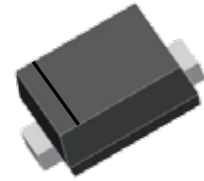


FEATURES

| Low current rectification

| Low forward voltage



SOD-923

MECHANICAL DATA

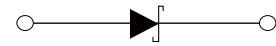
| SOD-923 Small Outline Plastic Package

| Epoxy UL: 94V-0

| Mounting Position: Any



Marking



Schematic Symbol

APPROVALS

RoHS Compliance with 2011/65/EU

HF Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
Non-Repetitive Peak Forward Current*1	I_{FSM}	500	mA
Continuous Forward Current	I_O	100	mA
Operating Junction Range	T_J	-55 ~ +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +125	$^{\circ}\text{C}$

*1:8.3ms Single Half Sine-Wave

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$			0.35	V
		$I_F=20\text{mA}$			0.40	
Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	30			V
Reverse Leakage Current	I_R	$V_R=10\text{V}$			10	μA
		$V_R=30\text{V}$			50	

CHARACTERISTIC CURVES

Fig.1 Forward Characteristics

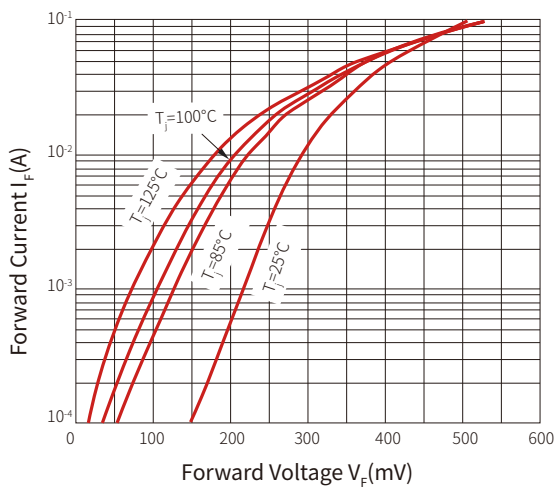


Fig.2 Reverse Characteristics

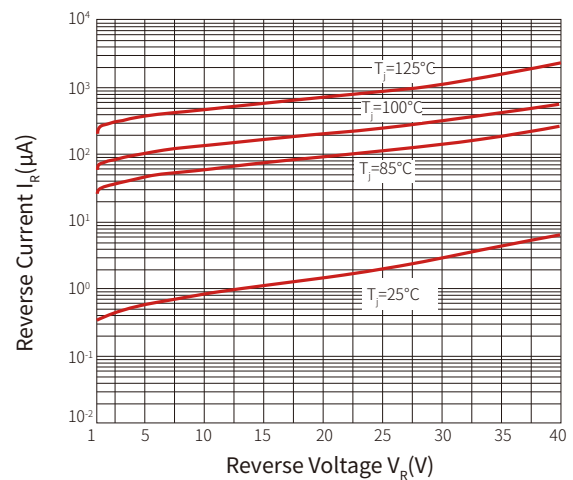
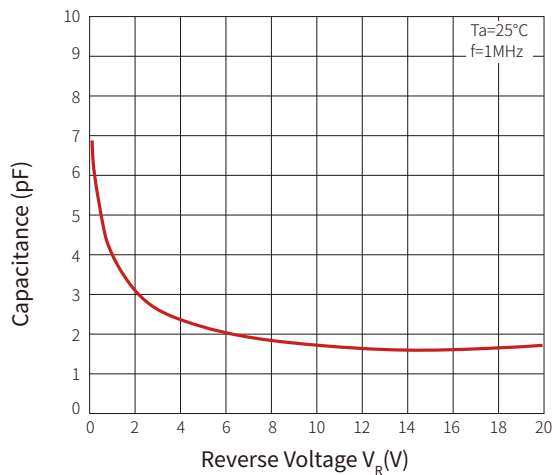
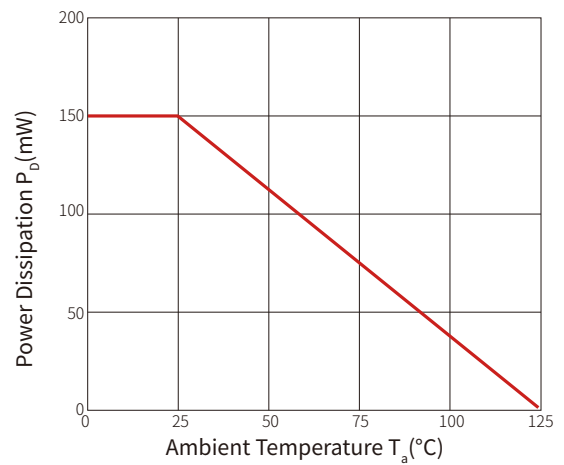
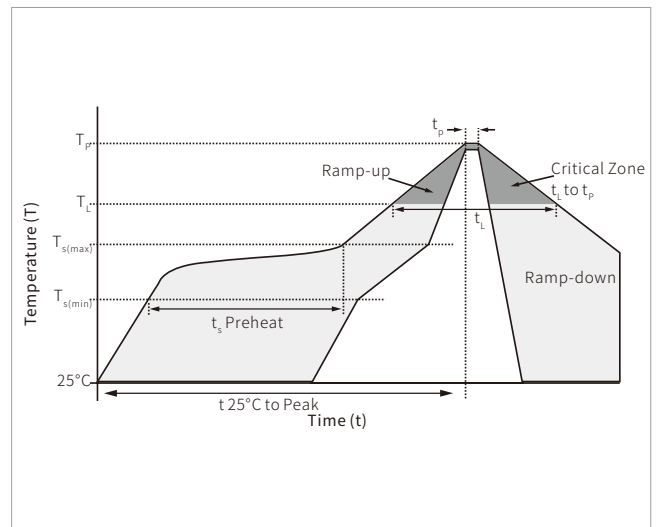


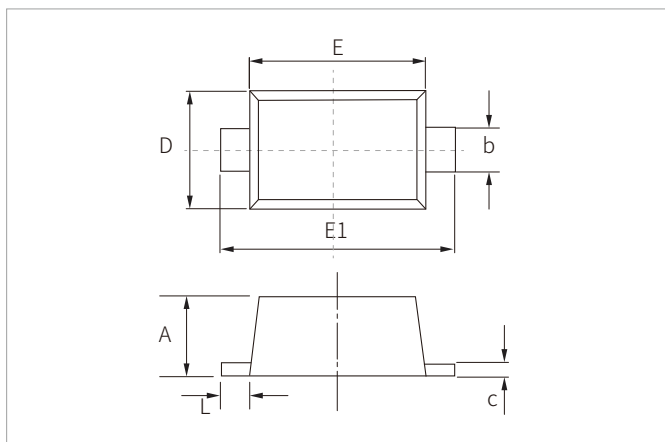
Fig.3 Capacitance Characteristics

Fig.4 Power Derating Curve


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(\min)}$)	150 $^\circ\text{C}$
	Temperature Max ($T_{s(\max)}$)	200 $^\circ\text{C}$
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3 $^\circ\text{C}/\text{second}$ max
$T_{s(\max)}$ to T_L - Ramp-up Rate		3 $^\circ\text{C}/\text{second}$ max
Reflow	Temperature (T_L) (Liquidus)	217 $^\circ\text{C}$
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260 $^\circ\text{C}$
Time within 5 $^\circ\text{C}$ of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6 $^\circ\text{C}/\text{second}$ max
Time 25 $^\circ\text{C}$ to peak Temperature (T_p)		8 minutes max.
Do not exceed		260 $^\circ\text{C}$

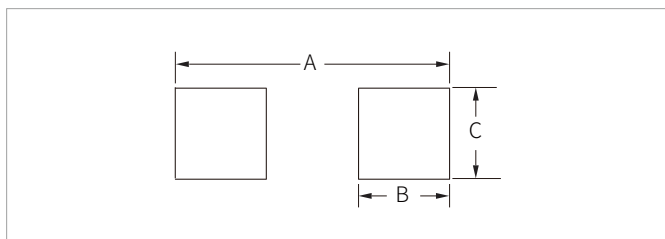


SOD-923 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.34	0.50	0.013	0.020
b	0.15	0.3	0.006	0.012
c	0.07	0.15	0.003	0.006
D	0.50	0.70	0.020	0.028
E	0.70	0.90	0.028	0.036
E1	0.90	1.10	0.036	0.044
L	0.05	0.15	0.002	0.006

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	1.10	0.043
B	0.30	0.012
C	0.40	0.016

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
RB521M9-30	SOD-923	8000PCS	7"

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By QR Code

Website



Wechat

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