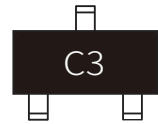


## FEATURES

- | Fast Switching Device (TRR <4nS)
- | Power Dissipation of 150mW
- | High Stability and High Reliability
- | Low reverse leakage



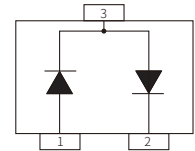
SOT-23



Marking

## MECHANICAL DATA

- | SOT-23 Small Outline Plastic Package
- | Epoxy UL: 94V-0
- | Mounting Position: Any



Schematic Symbol

## APPROVALS

- RoHS** | Compliance with 2011/65/EU
- HF** | Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

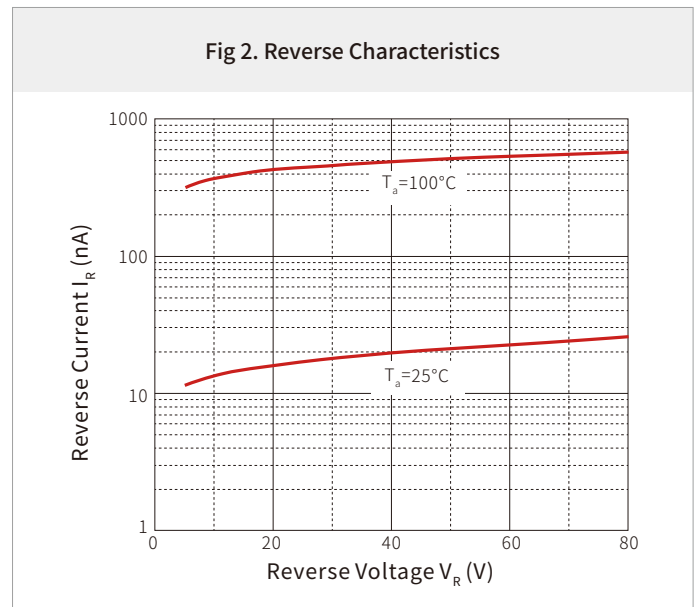
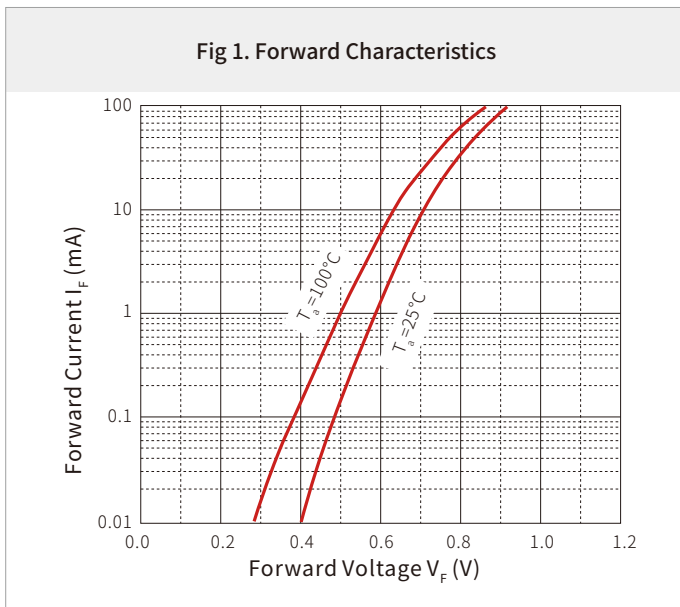
Parameter	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	85	V
Average Rectified Current	I <sub>O</sub>	100	mA
Power Dissipation	P <sub>D</sub>	150	mW
Non-repetitive Peak Forward Current	I <sub>FM</sub>	400	mA
Peak Forward Surge Current @tp=1ms; T <sub>A</sub> =25°C	I <sub>FSM</sub>	2.0	A
Operating Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>S</sub>	-65 to +150	°C
Typical Thermal Resistance	R <sub>θJA</sub>	833	°C/W

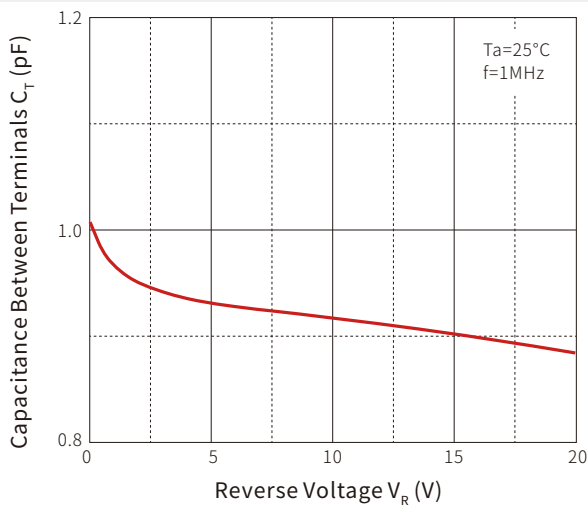
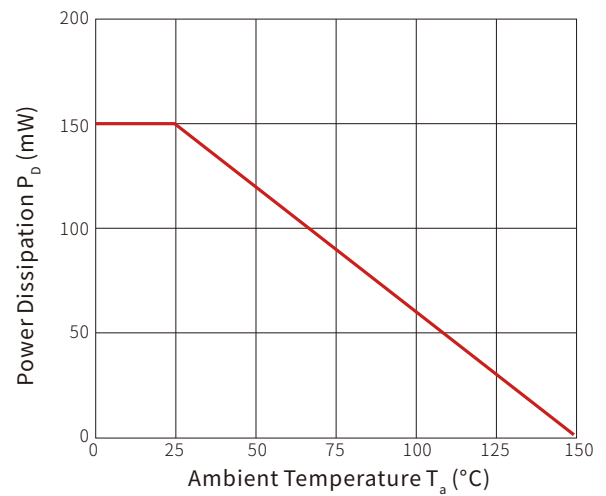
Valid provided that electrodes are kept at ambient temperature.

## ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C )

Parameter	Test Condition	Symbol	Min.	Max.	Unit
Reverse Voltage	I <sub>B</sub> = 100μA	V <sub>RB</sub>	85		V
Reverse Leakage Current	V <sub>R</sub> = 80V	I <sub>R</sub>		2.5	μA
Forward Voltage	I <sub>F</sub> = 1mA	V <sub>F</sub>		0.715	V
	I <sub>F</sub> = 10mA			0.855	
	I <sub>F</sub> = 100mA			1.00	
Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> = 10mA	T <sub>RR</sub>		4	nS
	R <sub>L</sub> = 100Ω				
	I <sub>RR</sub> = 0.1 X I <sub>R</sub>				
Capacitance	V <sub>R</sub> = 0V, f = 1MHZ	C <sub>T</sub>		3	pF

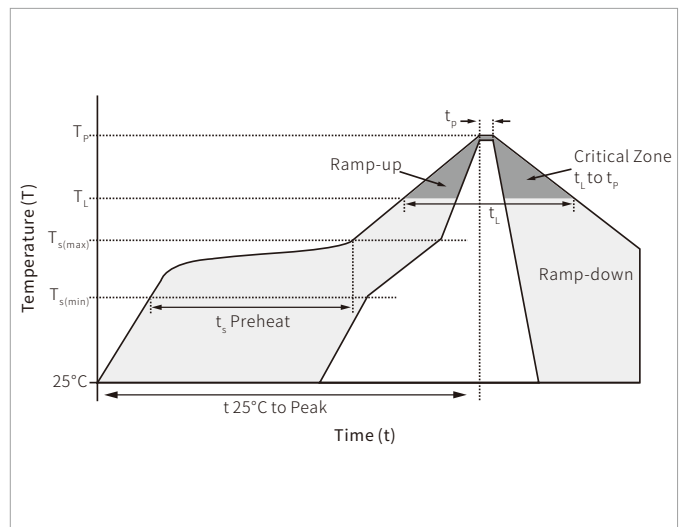
## CHARACTERISTIC CURVES



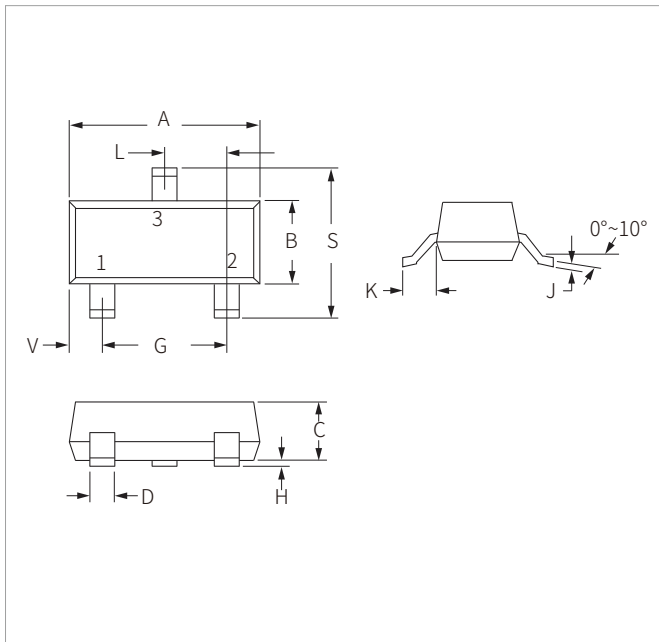
**Fig 3. Capacitance Characteristics**

**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 $^\circ\text{C}$

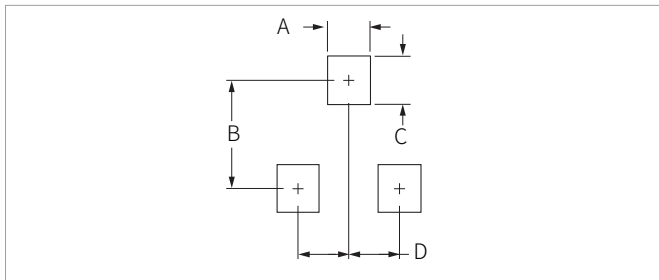


## SOT-23 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.05	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.90	1.15	0.035	0.045
D	0.37	0.50	0.015	0.020
G	1.75	2.05	0.069	0.081
H	0.01	0.100	0.001	0.004
J	0.085	0.180	0.003	0.007
K	0.35	0.69	0.014	0.029
L	0.89	1.02	0.035	0.040
S	2.10	2.65	0.083	0.104
V	0.45	0.60	0.018	0.024

## RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.71	0.97	0.028	0.038
B	1.88	2.13	0.074	0.084
C	0.71	0.97	0.028	0.038
D	0.81	1.07	0.032	0.042

## ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
1SS226	SOT-23	3000PCS	7"

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Website



Wechat

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