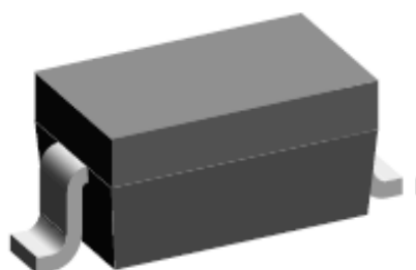


FEATURES

- Low Forward Voltage Drop
- Surface mount device type
- Moisture sensitivity level 1
- Pb free and RoHS compliant



SOD-323

MECHANICAL DATA

- Case: Bend lead SOD-323 package
- High temperature soldering guaranteed: 260°C/10s
- Weight: 4.3mg (approximately)

APPLICATION

- General purpose rectification application

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
		B5819WS-TP	
Non-Peak Repetitive Reverse Voltage	V _{RM}	40	V
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}	40	V
DC Blocking Voltage	V _R	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
Average Rectified Output Current	I _O	1	A
Peak Forward Surge Current @t=8.3ms	I _{FSM}	9	A
Repetitive Peak Forward Current	I _{FRM}	1.5	A
Power Dissipation	P _D	250	mW
Thermal Resistance form Junction to Ambient	R _{thJA}	400	°C/W
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

PARAMETER	TEST CONDITION	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	at I _R = 1 mA	V _(BR)	40		V
Reverse Voltage Leakage Currer	at V _R = 40 V	I _R	--		mA
Forward Voltage	at I _F = 1A at I _F = 3A	V _F		0.6 0.9	V
Diode Capacitance	V _R =4V, f=1.0MHz	C _D	--	120	pF

RATINGS AND CHARACTERISTICS CURVES ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Typical Forward Characteristics

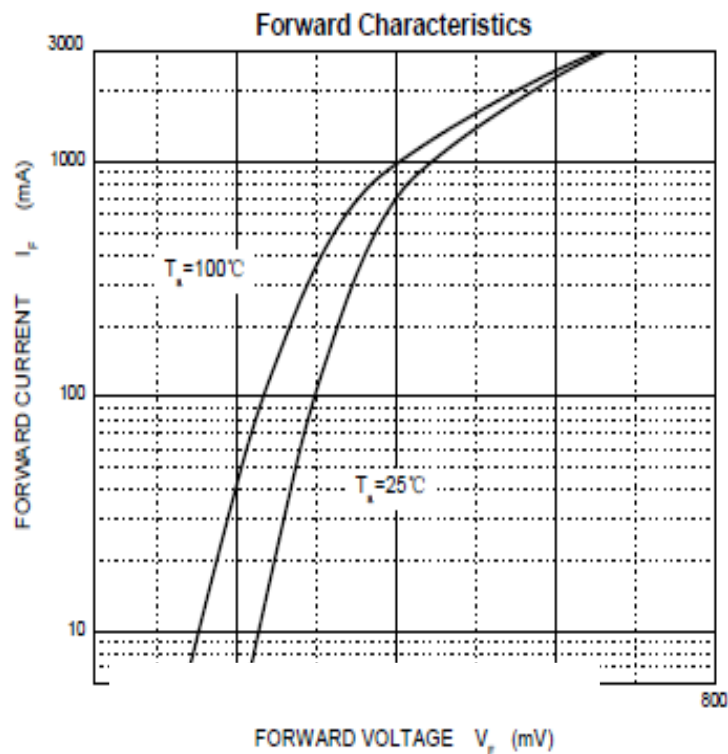


Fig. 2 Typical Reverse Characteristics

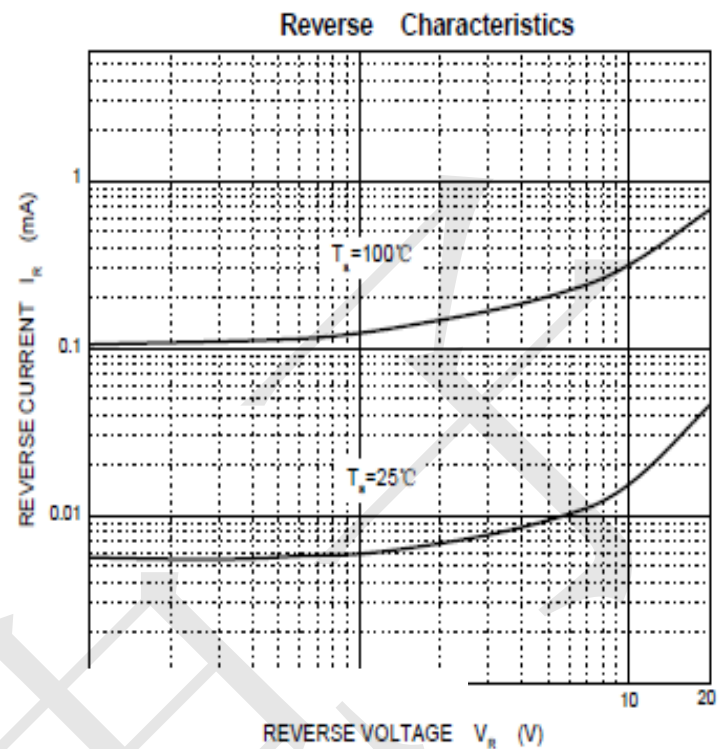


Fig. 3 Typical Capacitance vs. VR

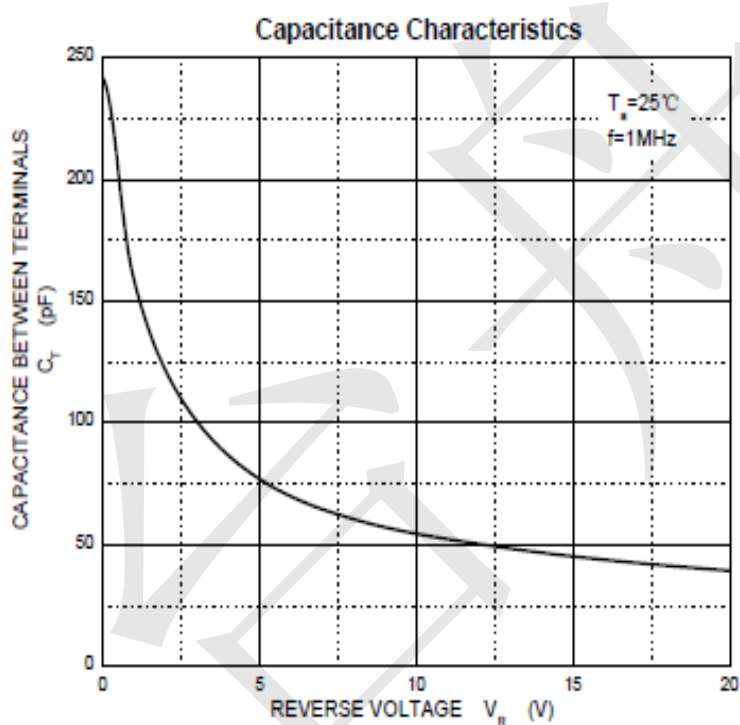
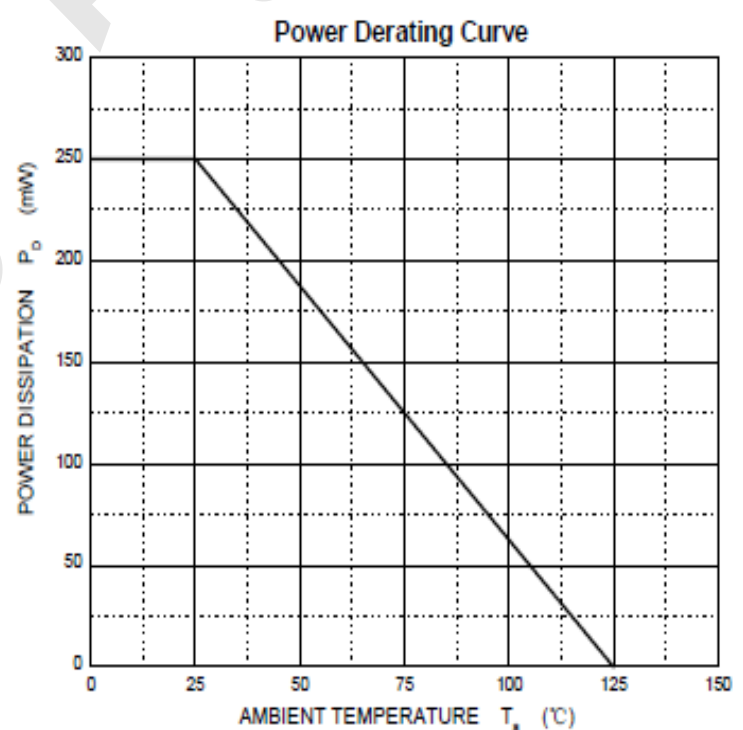
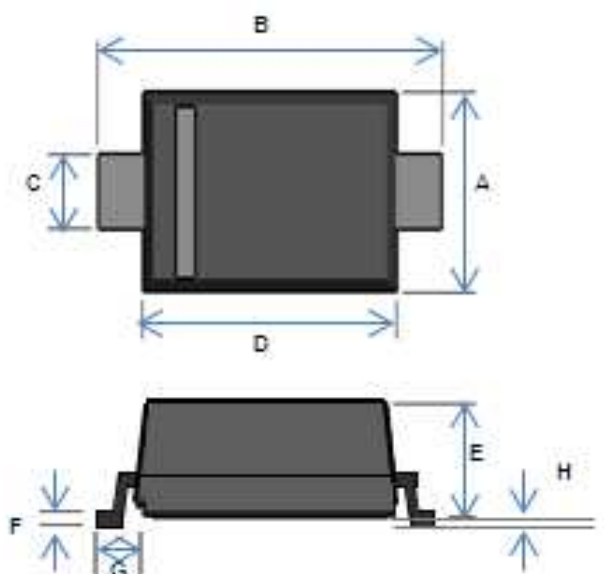


Fig. 4 Power Derating Curve



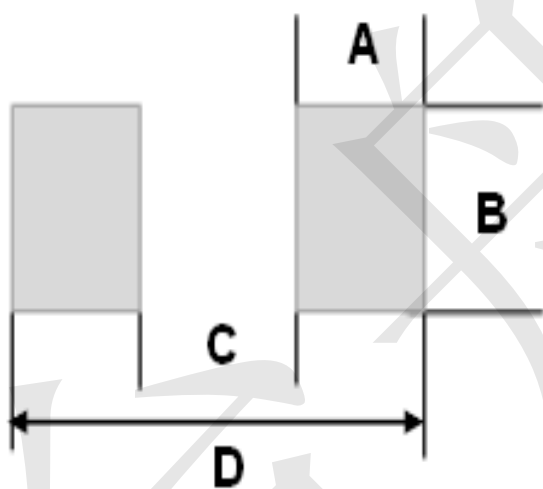
PACKAGE OUTLINE DIMENSIONS

SOD-323



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.40	0.045	0.055
B	2.30	2.70	0.091	0.106
C	0.25	0.45	0.010	0.018
D	1.60	1.80	0.063	0.071
E	0.80	1.00	0.031	0.039
F	0.05	0.17	0.002	0.007
G	0.475 REF		0.19 REF	
H	-	0.10	-	0.004

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	0.63	0.025
B	0.83	0.033
C	1.60	0.063
D	2.86	0.113