

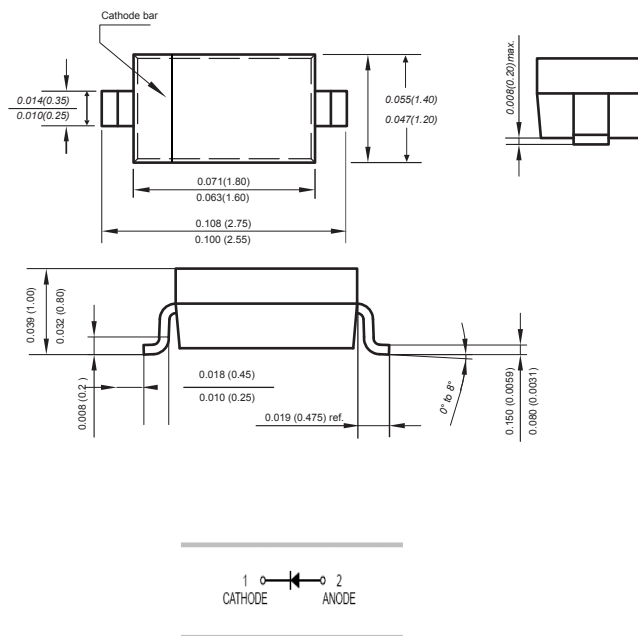
SOD-323

RoHS
COMPLIANT

Pb
Pb-Free

■ Features

- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time
- Low reverse capacitance



Dimensions in inches and (millimeters)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Working peak	V_{RWM}		
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	28	V
Forward continuous current	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$	I_{FRM}	1.5	A
Power Dissipation	P_d	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	667	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	$^\circ\text{C}$

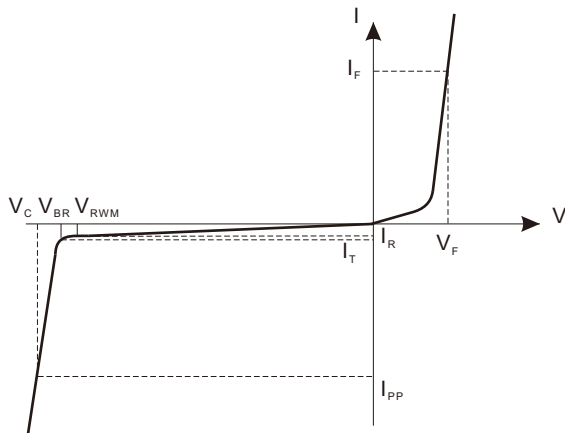
Notes: 1. Part mounted on FR-4 board with recommended pad layout

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100 \mu\text{A}$	40			V
Forward Voltage Drop	V_{FM}	$I_F = 20\text{mA}$ $I_F = 200\text{mA}$			0.37 0.60	V
Peak Reverse Current	I_{RM}	$V_R = 30\text{V}$			5	μA
Total Capacitance	C_T	$V_R = 0\text{V}, f = 1.0\text{MHz}$		50		pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 200\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		10		ns



Ratings And Characteristic Curves



I_{PP} : Maximum Reverse Peak Pulse Current
 V_C : Clamping Voltage @ I_{PP}
 V_{RWM} : Working Peak Reverse voltage
 I_R : Maximum Reverse Leakage Current @ V_{RWM}
 I_T : Test Current
 V_{BR} : Breakdown voltage @ I_T
 I_F : Forward Current
 V_F : Forward Voltage @ I_F

FIG.1-PULSE WAVEFORM

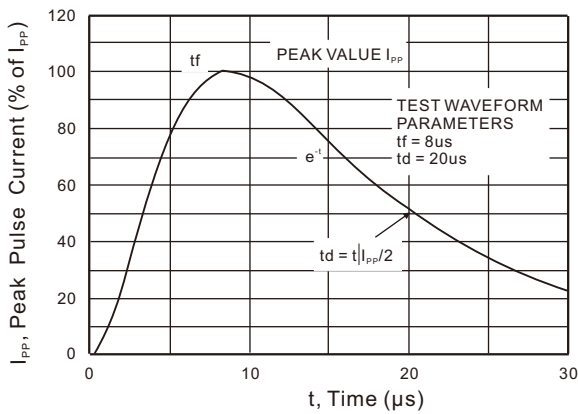
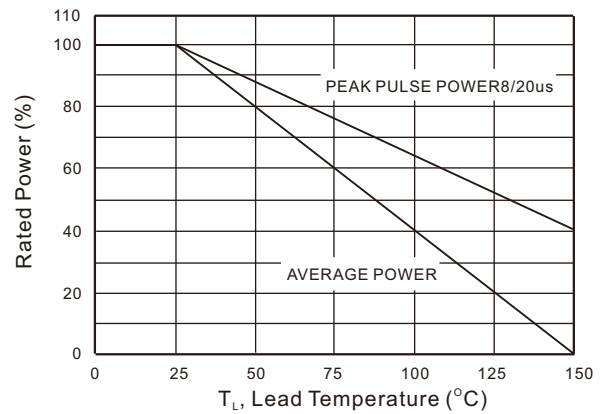
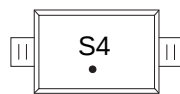


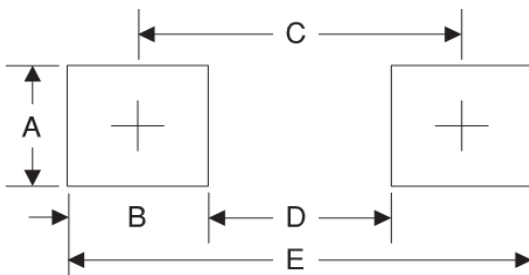
FIG.2-POWER DERATING



Marking



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.2	0.048
B	1.15	0.045
C	3.10	0.122
D	1.95	0.077
E	4.25	0.167