

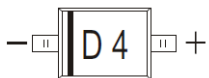
FEATURES

- Small Surface Mounting Type
- Low V_F
- High Reliability

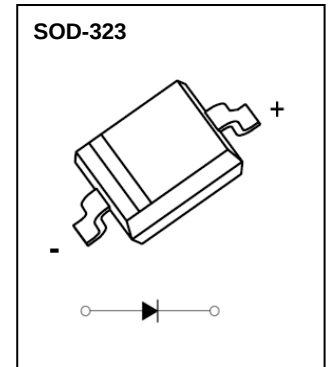
APPLICATIONS

- High-Frequency Rectification Switching Regulators

MARKING: D4



SOD-323 Plastic-Encapsulate Diodes



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

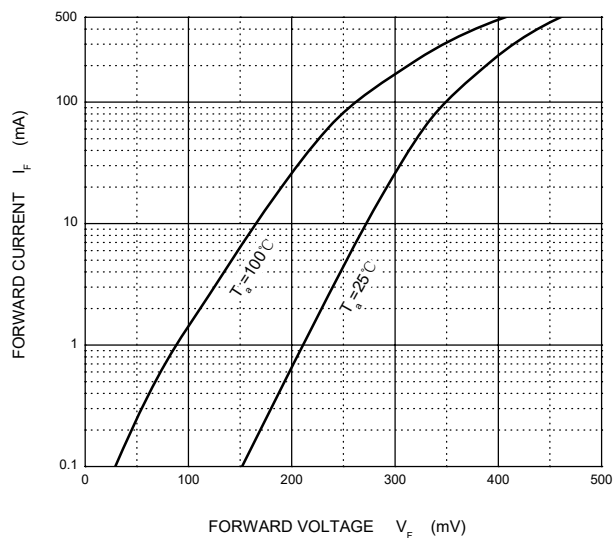
Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	40	V
I_O	Continuous Forward Current	500	mA
I_{FSM}	Non-repetitive Forward Peak Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	500	$^{\circ}\text{C}/\text{W}$
T_j	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

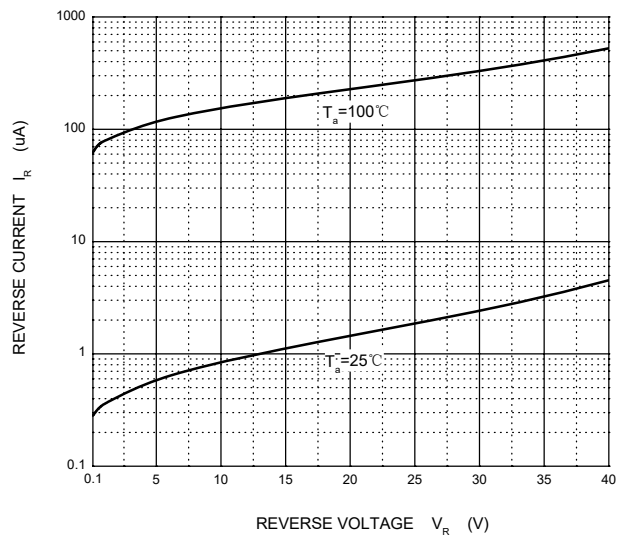
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1\text{mA}$	40			V
Reverse current	I_R	$V_R=40\text{V}$			0.1	mA
Forward voltage	V_F	$I_F=500\text{mA}$			0.47	V

Typical Characteristics

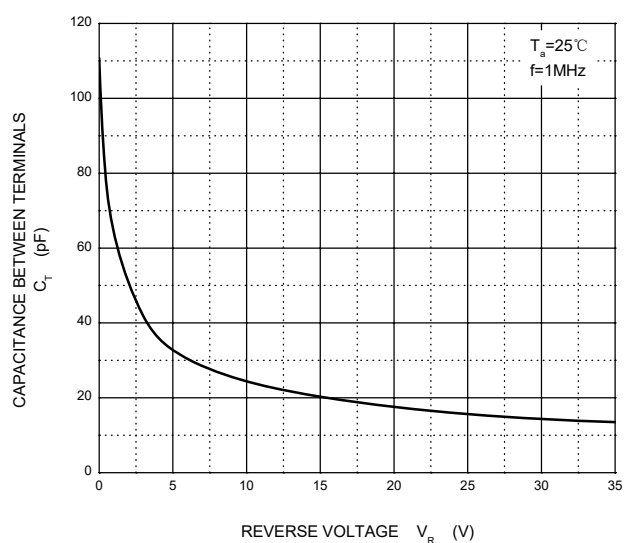
Forward Characteristics



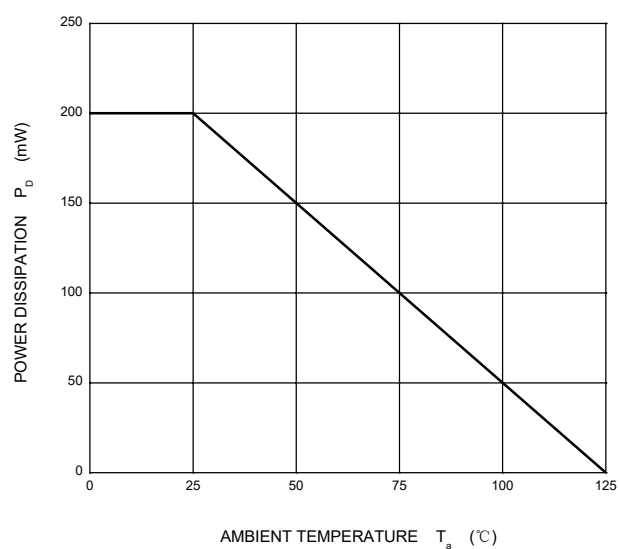
Reverse Characteristics

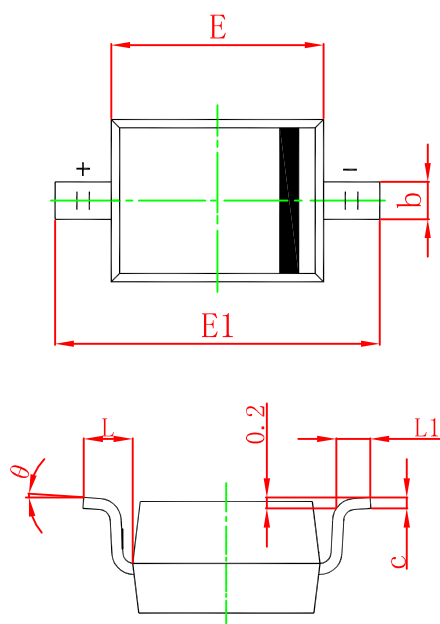


Capacitance Characteristics



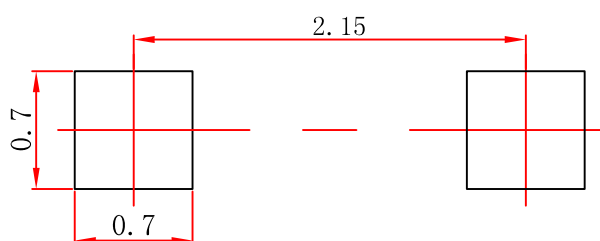
Power Derating Curve





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.