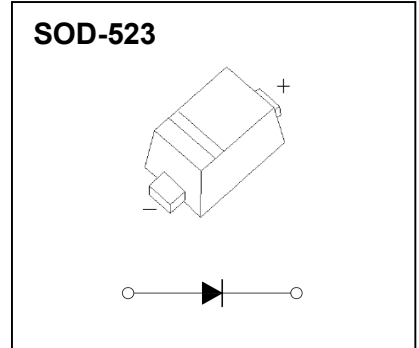


FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance

SOD-523 Plastic-Encapsulate Diodes



MARKING: S4



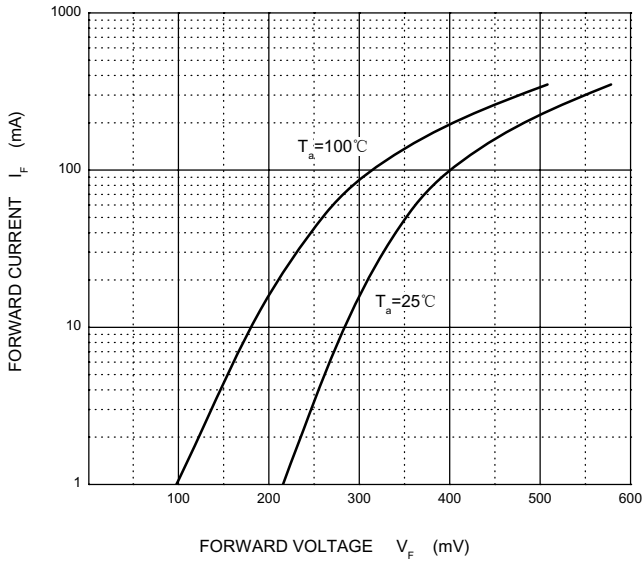
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	40	V
V _{RWM}	Working Peak Reverse Voltage		
V _R	DC Blocking Voltage		
V _{R(RMS)}	RMS Reverse Voltage	28	V
I _{FM}	Forward Continuous Current	350	mA
I _{FSM}	Non-Repetitive Peak Forward Surge Current@t=8.3ms	2	A
P _D	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	667	°C/W
T _j	Junction Temperature	125	°C
T _{stg}	Storage Temperature	-55~+150	°C

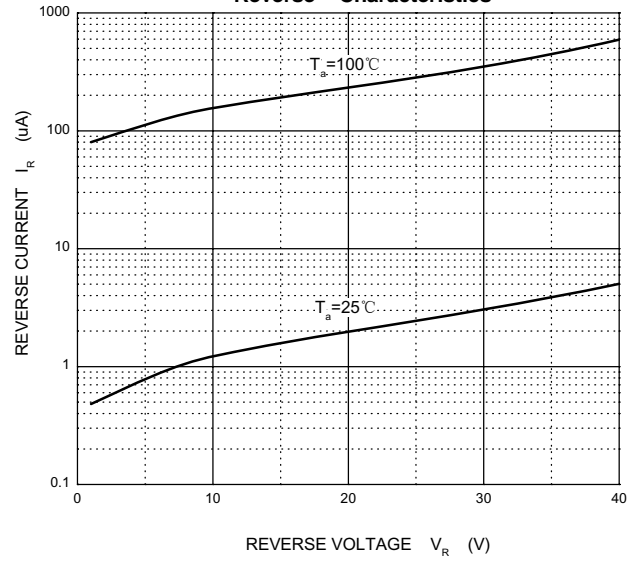
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =100μA	40			V
Reverse current	I _R	V _R =30V			5	μA
		V _R =20V			2	
		V _R =10V			1	
Forward voltage	V _F	I _F =1mA		0.27		V
		I _F =5mA		0.32		
		I _F =20mA			0.37	
		I _F =200mA			0.6	
Total capacitance	C _{tot}	V _R =0V,f=1MHz		50		pF
Reverse recovery time	t _{rr}	I _F = I _R =200mA, I _{rr} =0.1×I _R , R _L =100Ω		10		ns

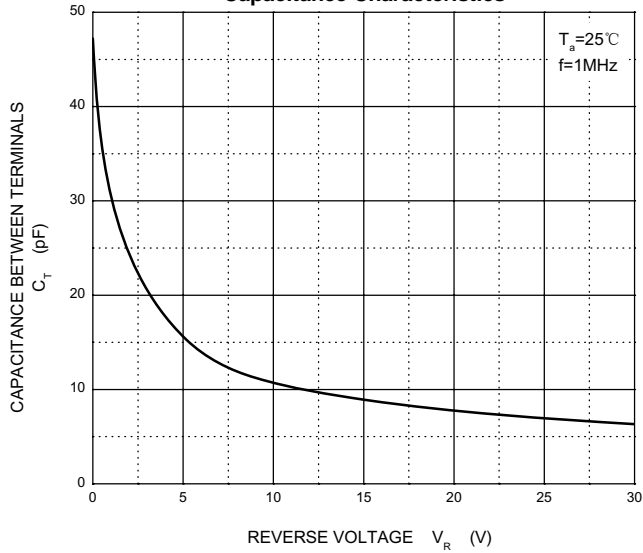
Forward Characteristics



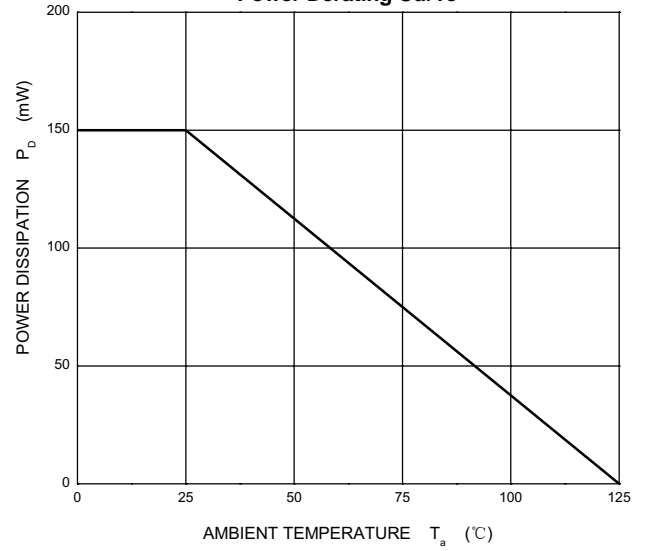
Reverse Characteristics

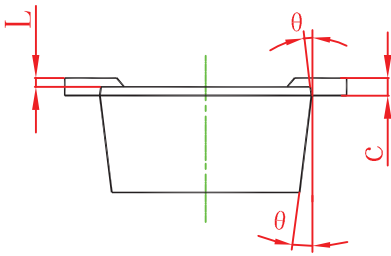
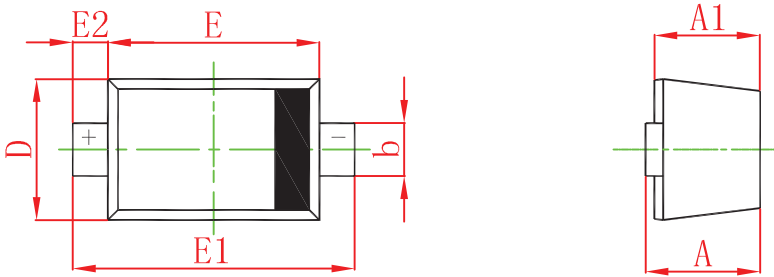


Capacitance Characteristics



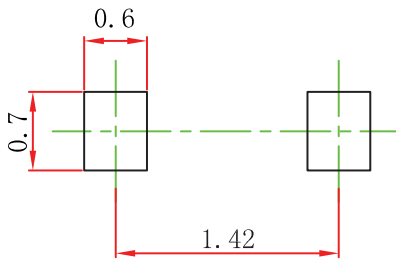
Power Derating Curve





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-523 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.