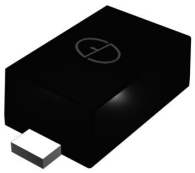
SOD-523 Plastic-Encapsulate Diode

Features

- Low Forward Voltage Drop
- Extremely Fast Switching Speed
- Surface Mount Package Ideally
- Suited For Automatic Insertion

RoHS COMPLIANT



Marking: JV **SOD-523**

Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

Maximum Ratings & Thermal Characteristics (T_A =25°C unless otherwise noted)

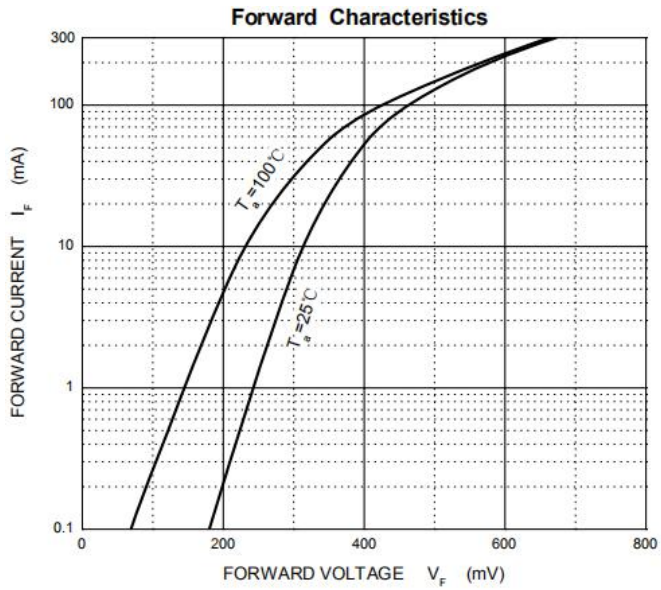
Parameters	Symbol	Value	Unit
DC Blocking Voltage	V_R	21	V
Peak Repetitive Reverse Voltage	V_{RM}	30	V
Average Rectified Output Current	I_O	100	mA
Forward Continuous Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
Power Dissipation	P_D	150	mW
Typical thermal resistance	$R_{\theta JA}$	667	℃/W
Storage temperature range	T_{STG}	-55-+150	℃
Junction temperature	T_J	125	℃

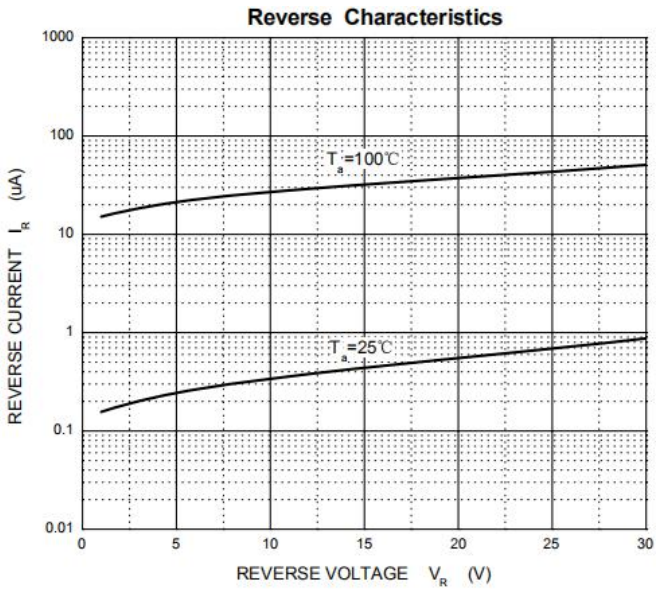
Electrical Characteristics (T_A =25°C unless otherwise noted)

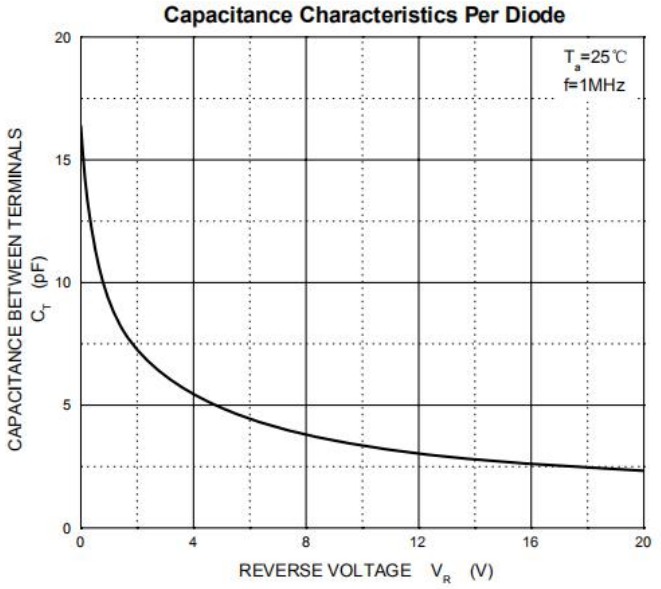
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Reverse Breakdown Voltage	V_R	IR=10uA	30			V
Maximum reverse current	I_R	VR=25V			2.0	uA
Maximum forward voltage	V_F	IF=0.1mA			0.24	V
		IF=1mA			0.32	
		IF=10mA			0.40	
		IF=30mA			0.50	
		IF=100mA			1.0	
Type junction capacitance	C_j	VR=1V, f=1MHZ			10	pF
Reverse Recover Time	T_{rr}	I_F = I_R = 10 mA, to1mA , ,R_L=100Ω			5	nS

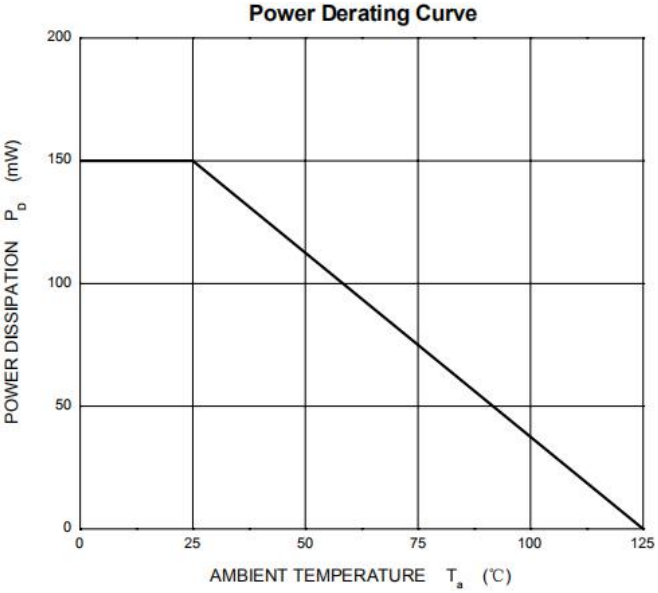
Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)



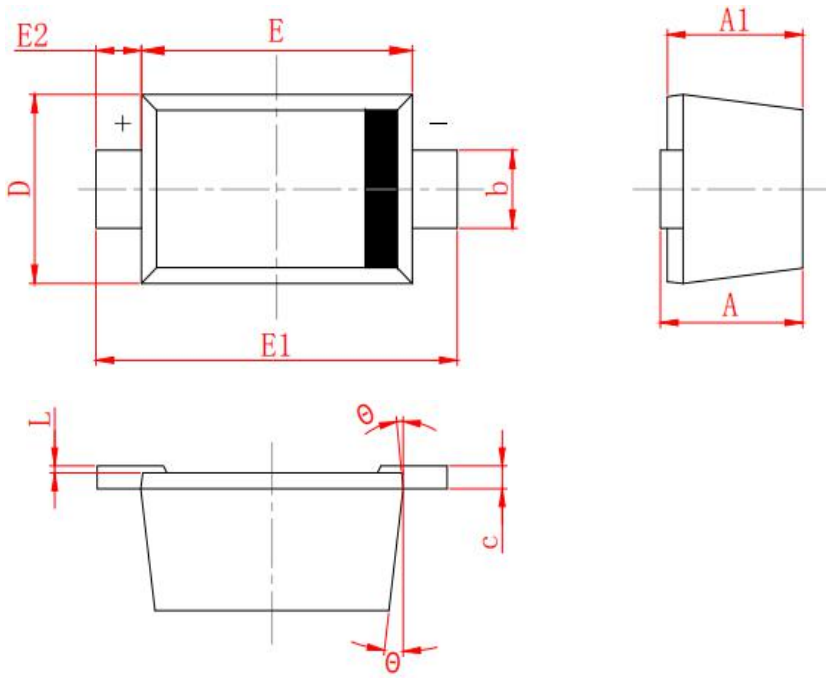






Package Outline Dimensions

millimeters



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.530	0.730
A1	0.500	0.700
b	0.280	0.380
c	0.080	0.150
D	0.750	0.850
E	1.100	1.300
E1	1.500	1.700
E2	0.200 REF	
L	0.010	0.070
θ	7° REF	

Revision History

Document Version	Date of release	Description of changes
Rev.A	2020.06.17	First issue

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