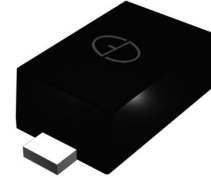


SOD-523 Plastic-Encapsulate Diode

Features

- Small surface mounting type
- High speed
- High reliability with high surge Current handing capability



Mechanical Data

- SOD-523 small outline plastic package
- Polarity: color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting position: any

Marking: A SOD-523

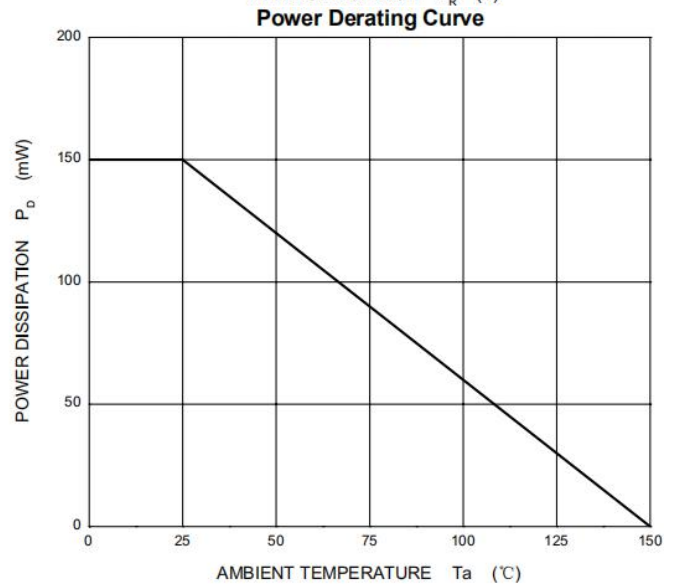
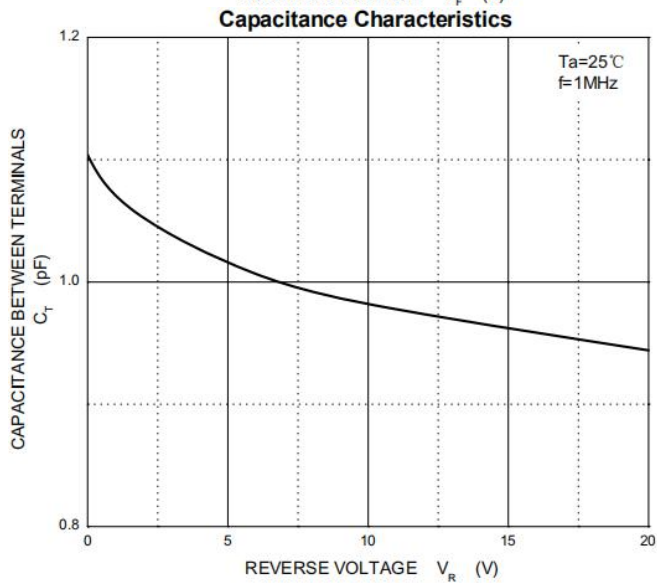
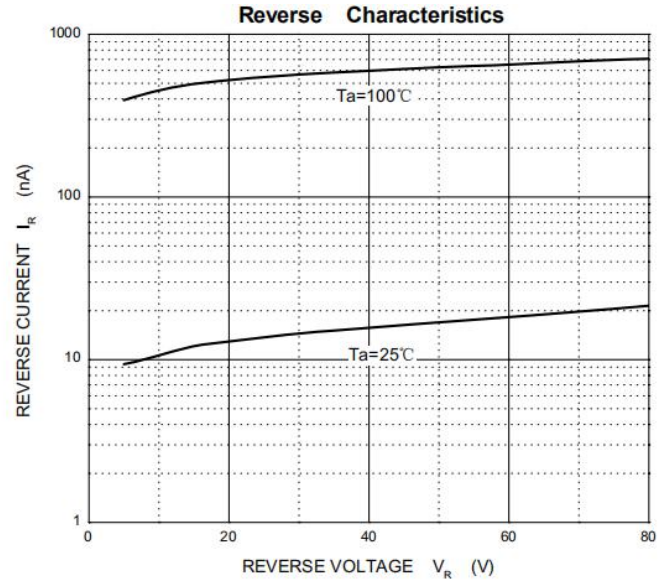
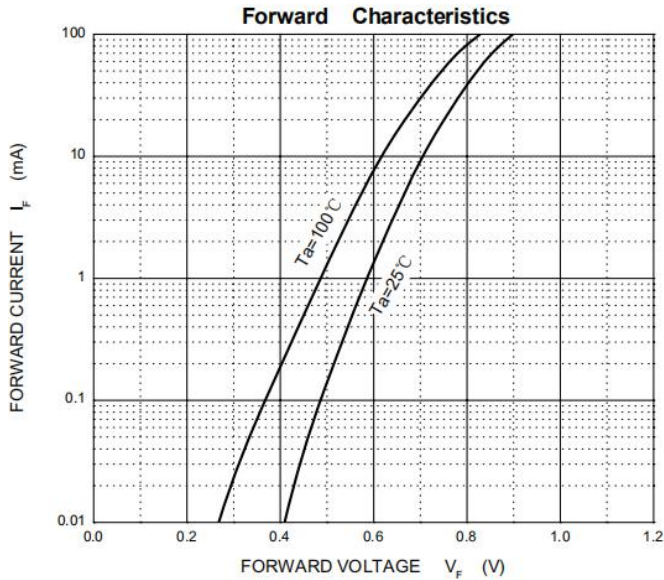
Maximum Ratings& Thermal Characteristics (T _A =25°C unless otherwise noted)			
Parameters	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	90	V
DC Blocking Voltage	V _R	80	V
Power Dissipation	P _D	150	mW
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55+150	°C
Average Rectified Current	I _O	100	mA
Non-repetitive Peak Forward Current	I _{FM}	225	mA
Non-repetitive Peak Forward Surge Current@t= 8.3ms	I _{FSM}	2.0	A
Thermal Resistance from Junction to Ambient	R _{θJA}	833	°C/W

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (T _A =25°C unless otherwise noted)					
Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Forward Voltage	V _F	I _F =100mA		1.20	V
Reverse Leakage Current	I _R	V _R =80V		0.1	uA
Reverse Recovery Time	T _{RR}	I _F = 10mA, V _R =6V R _L =100Ω		4	nS
Capacitance	C _J	V _R =0.5V, f=1MHZ		3	pF

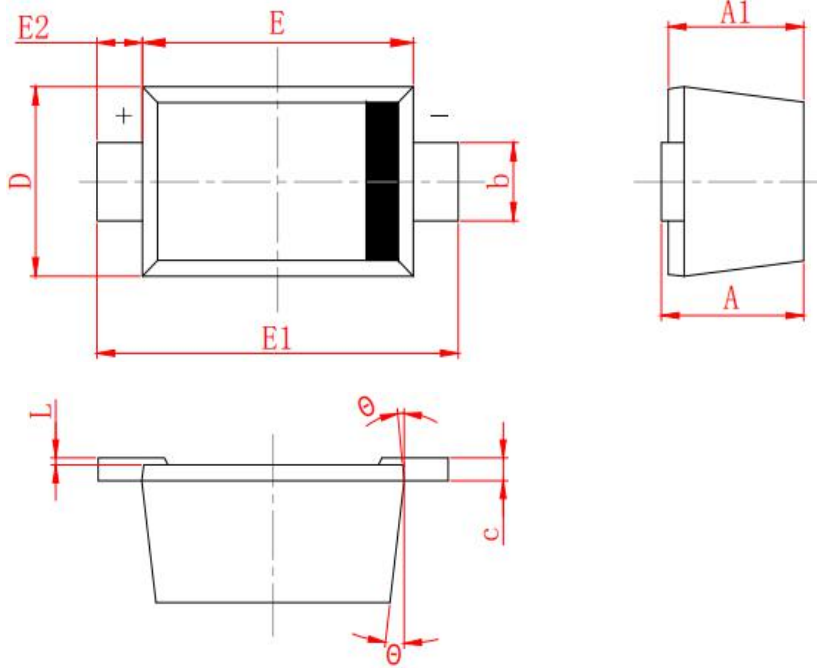
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ 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	2020.07.21	First issue

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