



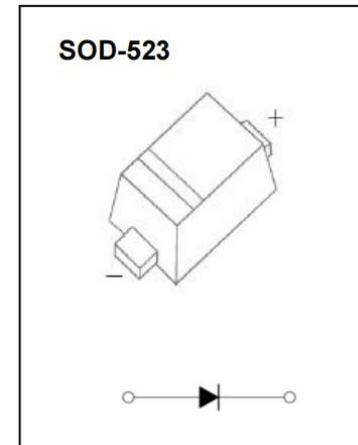
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD.

AD-1N4448X Plastic-Encapsulated Diode

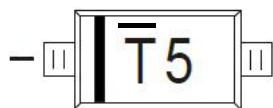
AD-1N4448X FAST SWITCHING DIODE

FEATURES

- Small package
- Low reverse current
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- AEC-Q101 qualified



MARKING: T5



T5 = Device code

The marking bar indicates the cathode

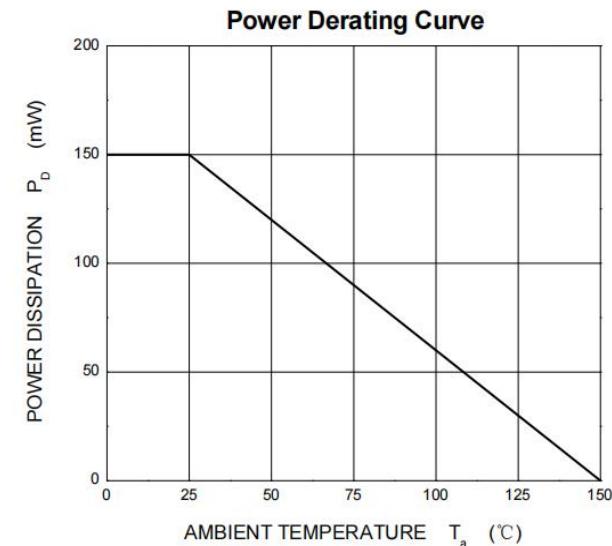
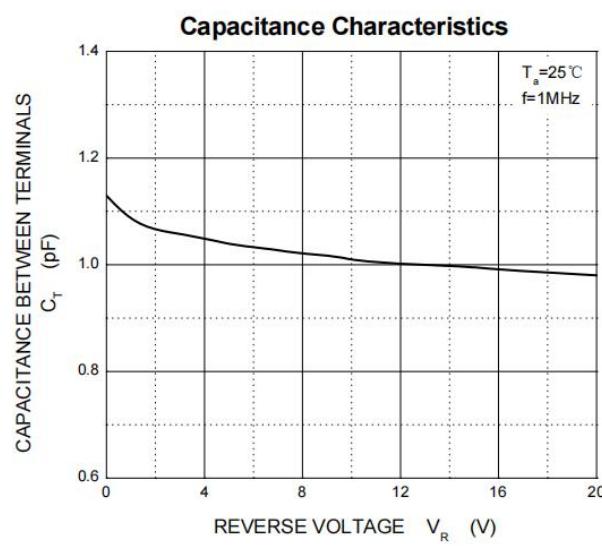
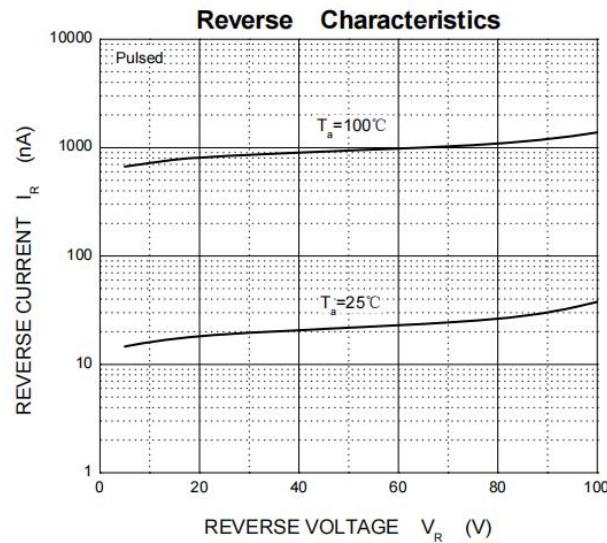
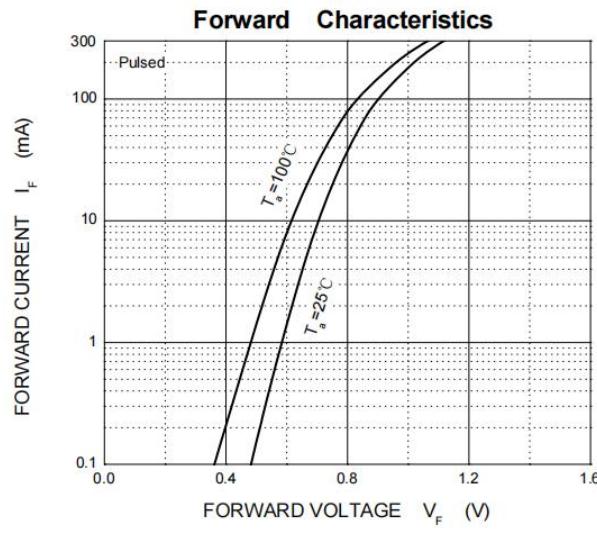
MAXIMUM RATINGS (T_j = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
DC blocking voltage	V _R	75	
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	
RMS reverse voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Non-repetitive peak forward surge current @ t = 8.3ms	I _{FSM}	2	A
Power dissipation	P _D	150	mW
Thermal resistance from junction to ambient	R _{θJA}	833	°C/W
Storage temperature range	T _{stg}	-55 ~ +150	°C

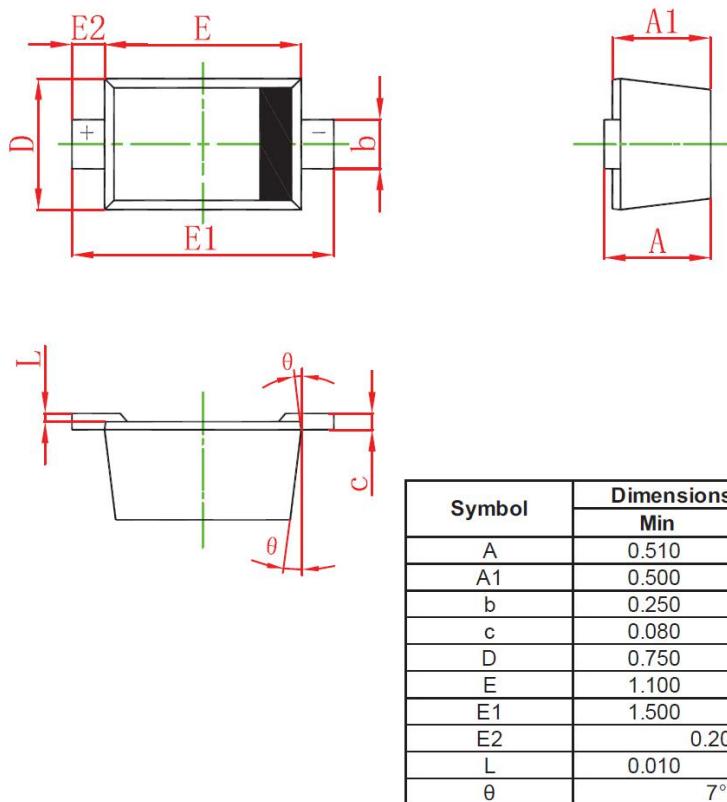
ELECTRICAL CHARACTERISTICS (T_j = 25°C unless otherwise specified)

Parameter	Symbol	Test condition	Min	Typ	Max	Unit
Reverse breakdown voltage	V _{(BR)R}	I _R = 5µA	75			V
	V _{(BR)R}	I _R = 100µA	100			V
Forward voltage	V _{F1}	I _F = 5mA	0.62		0.72	V
	V _{F2}	I _F = 100mA			1.0	
	I _R	V _R = 20V			25	nA
Reverse recovery time	T _{rr}	I _F = I _R = 10mA, I _{rr} = 0.1XI _R , R _L = 100Ω			4	ns
Capacitance between terminals	C _T	V _R = 0V, f = 1MHz			4	pF

TYPICAL CHARACTERISTICS



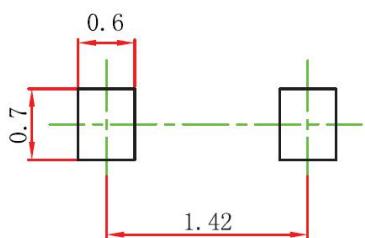
SOD-523 PACKAGE OUTLINE DIMENSIONS



SOD-523 SUGGESTED PAD LAYOUT

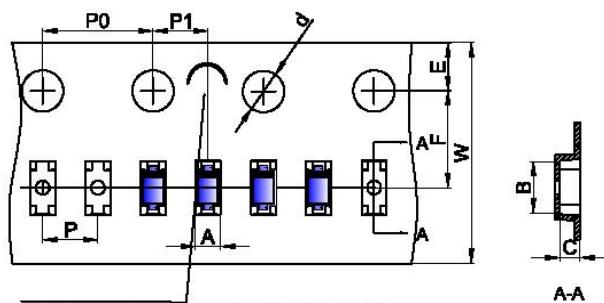
Note:

1. Controlling dimension in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purpose only.



SOD-523 TAPE AND REEL

SOD-523 Embossed Carrier Tape



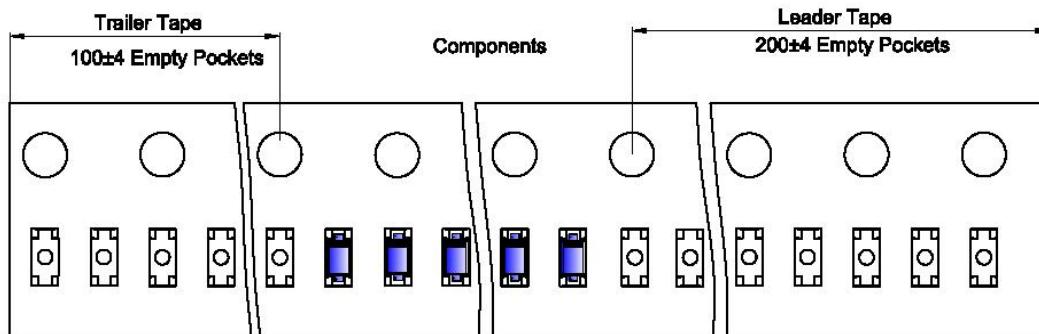
Packaging Description:

SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

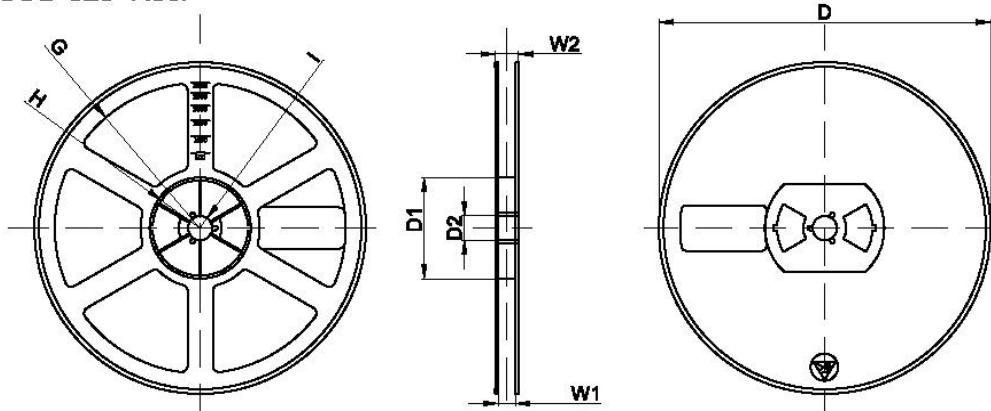
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

SOD-523 Tape Leader and Trailer



SOD-523 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.80	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 Inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	

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