

SILICON EPITAXIAL PLANAR DIODE

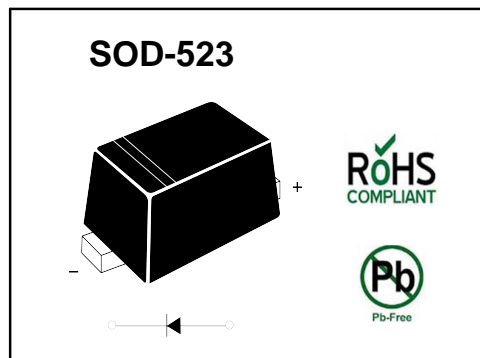
ESD protection diode

Features

- Ultra small mold type
- Bi-direction high reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

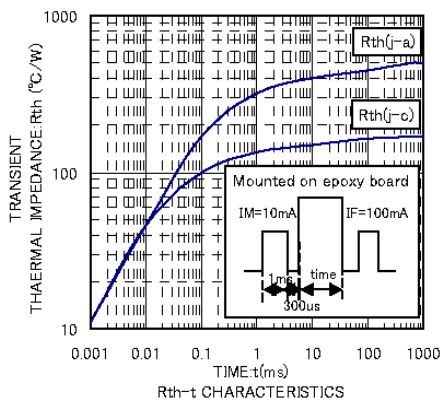
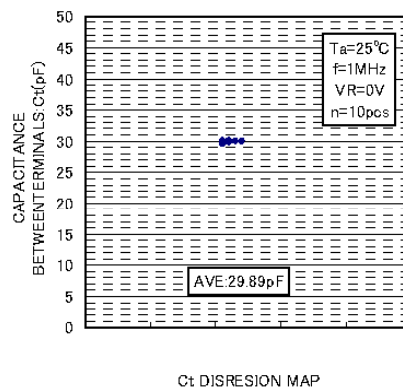
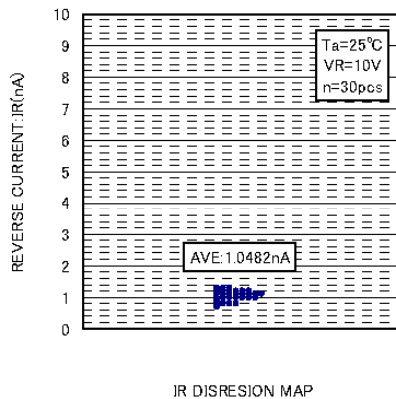
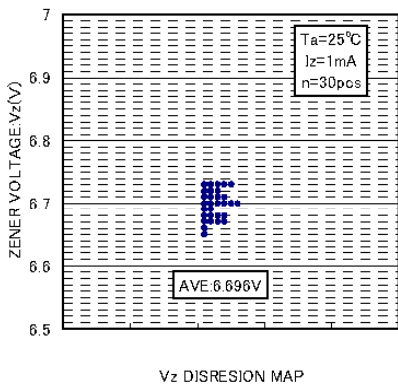
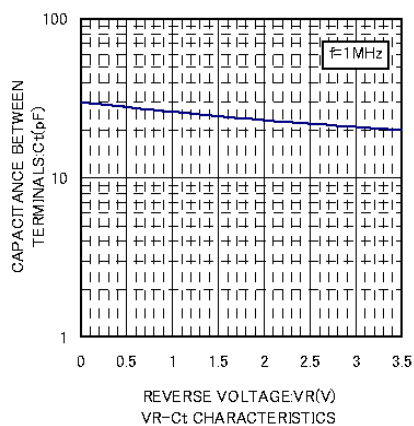
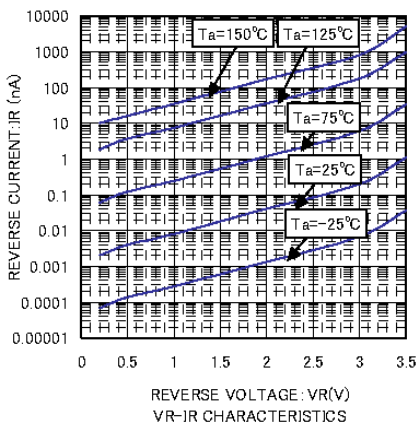
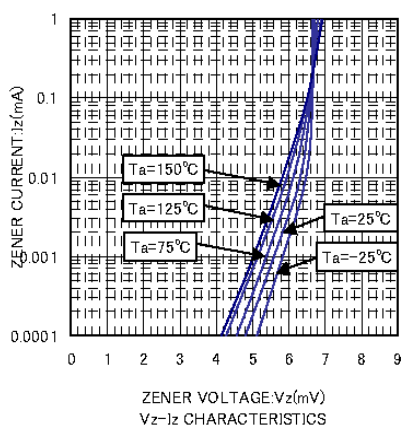


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

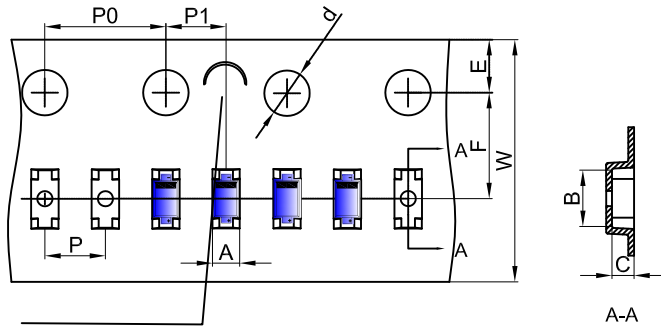
Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 10 \times 1000\ \mu\text{s}$)	P_{PK}	10	W
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$
Operation Temperature Range	T_{opr}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Zener Voltage at $I_Z = 1\ \text{mA}$	V_Z	5.5	8	V
Reverse Current at $V_R = 3.5\ \text{V}$	I_R	-	0.01	μA
Capacitance between Terminals at $V_R = 0\ \text{V}$, $f = 1\ \text{MHz}$	C_T	-	30	pF
ESD Voltage Capability (Contact Discharge Mode) at Discharge Capacitance / Resistance: 150 pF / 330 Ω	-	-	15	KV
ESD Voltage Capability (Air Discharge Mode) at Discharge Capacitance / Resistance: 150 pF / 330 Ω	-	-	25	KV



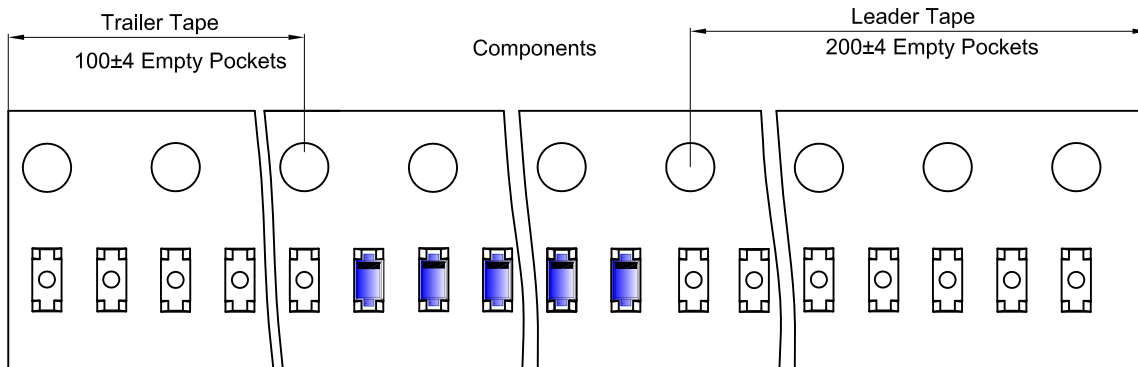
SOD-523 Embossed Carrier Tape



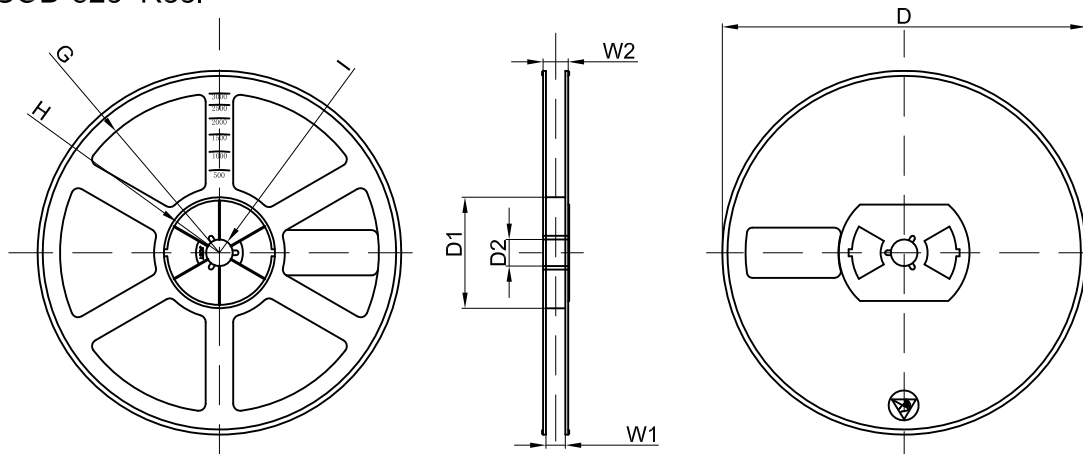
NOTE: TO GAVE 'C' ON CARRIER TAPE PER 120MM

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



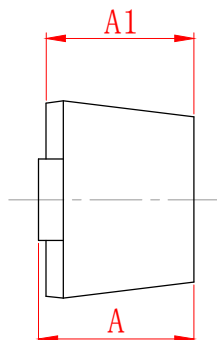
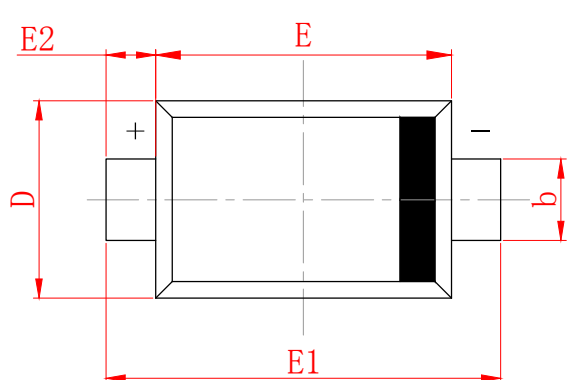
SOD-523 Reel



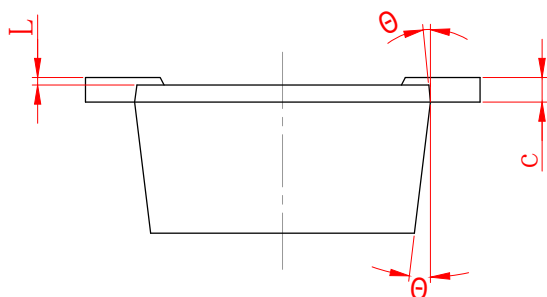
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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	

SOD-523 Package Outline Dimensions



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	



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