



GP
ELECTRONICS

SD103CX

20V-0.35A Schottky Barrier Diode

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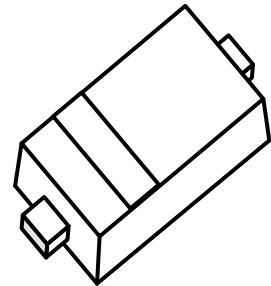
Feature

- Low Forward Voltage Drop
- Low VF
- Low IR
- High Reliability

MARKING:



SOD-523



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

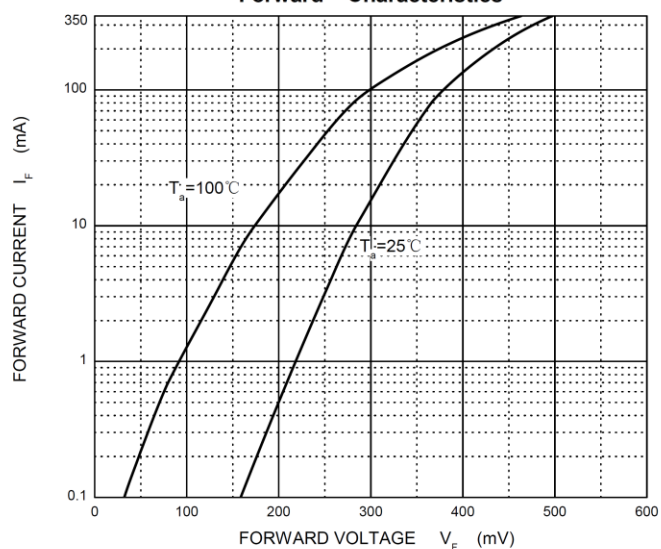
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	20	V
Forward Continuous Current	I_{FM}	0.35	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2	A
Power Dissipation	P_D	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C/W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

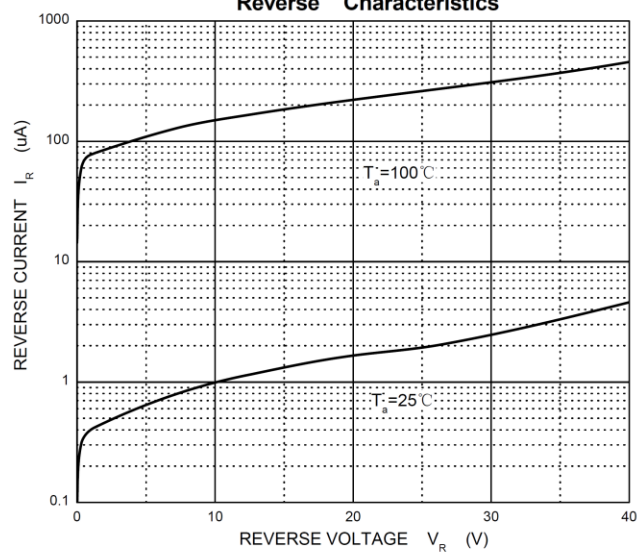
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	$I_R=100\mu\text{A}$	20			V
Forward voltage	V_F	$I_F=20\text{mA}$			0.37	V
		$I_F=200\text{mA}$			0.60	V
Reverse current	I_R	$V_R=10\text{V}$			5	μA
Capacitance between terminals	C_T	$V_R=0, f=1\text{MHz}$		50		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=200\text{mA}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$		10		nS

Typical Characteristics

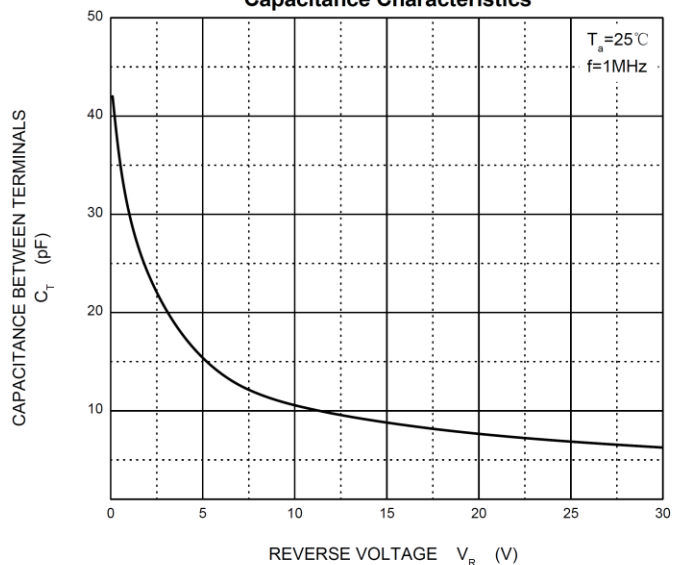
Forward Characteristics



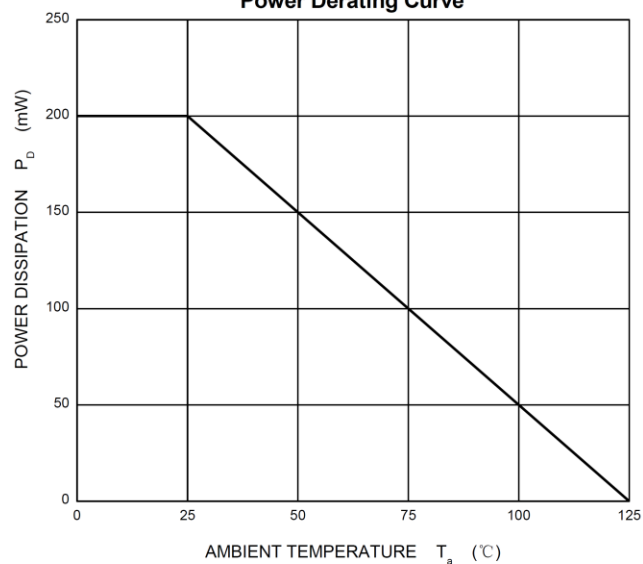
Reverse Characteristics

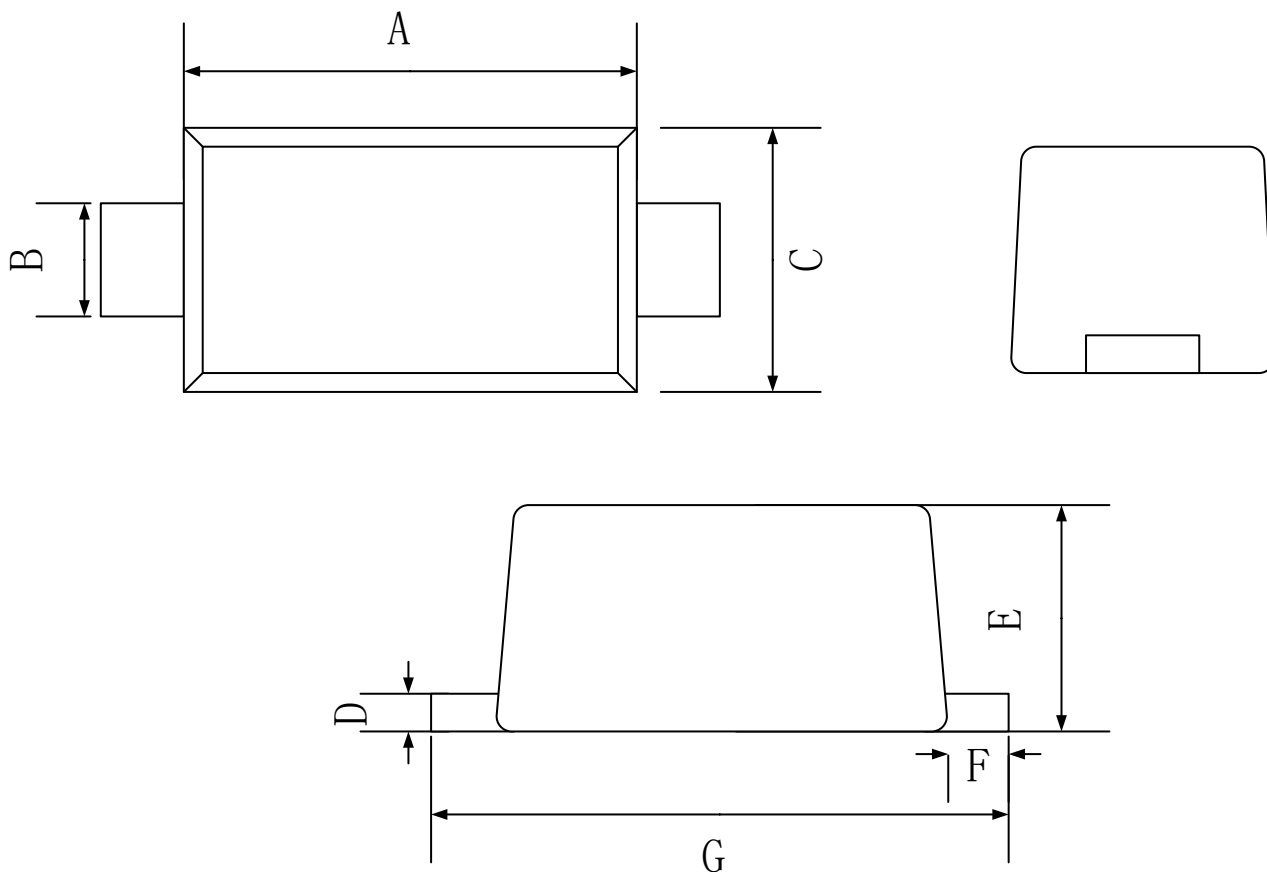


Capacitance Characteristics



Power Derating Curve

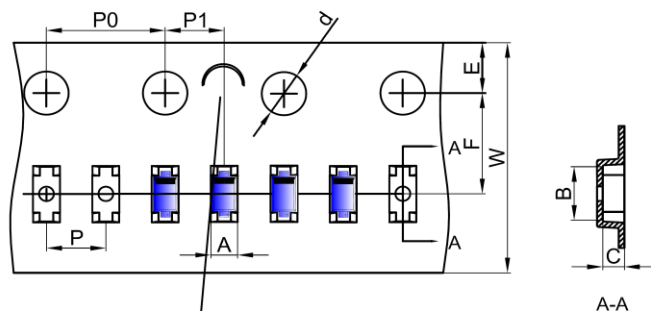


SOD-523 Package Outline Dimensions


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	1.10	1.20	1.30
B	0.25	0.30	0.35
C	0.75	0.80	0.85
D	0.08	0.10	0.15
E	0.45	0.65	0.70
F	0.20 REF		
G	1.50	1.60	1.70

SOD-523 Tape and Reel

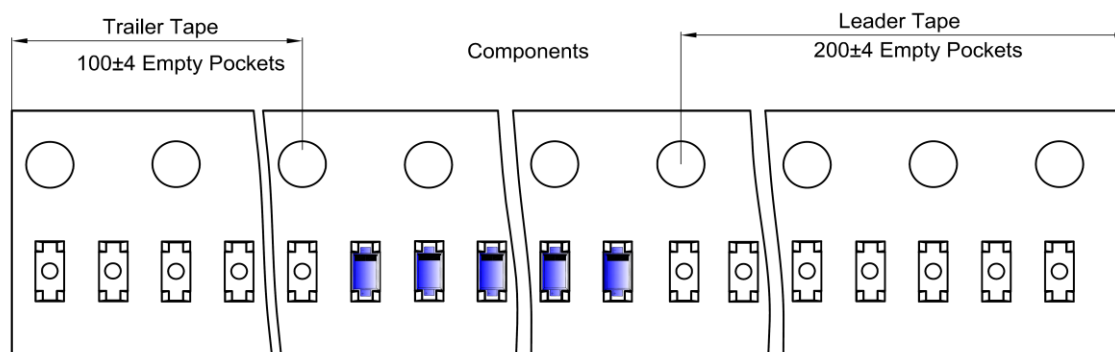
SOD-523 Embossed Carrier Tape



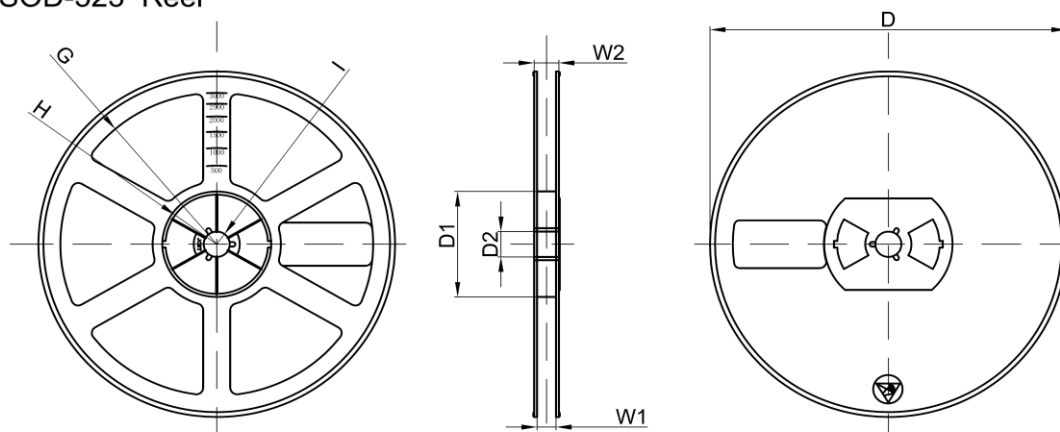
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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	R25.60	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	