

200mA Plastic-Encapsulate Schottky Barrier Diode - 40V
PRIMARY CHARACTERISTICS

P_D	150mW
V_R	40V
I_O	200mA
$V_F@I_F=100mA$	0.55V
$T_{J,Max}$	125°C

FEATURES

- Small surface mounting type
- Low I_R
- High reliability
- Moisture Sensitivity Level 1

SOD-523
PACKAGE

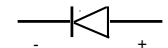
Marking : D1 \ D



or



Date Code List			
Month	Odd Year	Even Year	
Jan	1	E	
Feb	2	F	
Mar	3	H	
Apr	4	J	
May	5	K	
Jun	6	L	
Jul	7	N	
Aug	8	P	
Sep	9	U	
Oct	T	X	
Nov	V	Y	
Dec	C	Z	



- 1.D:Device Code --fixed
- 2.K:Data Code --Change in Month
- 3.DEV 底下加" • " :Pb Free Product
- 4.D/C下方加" • • " 則是產線別的區分

MECHANICAL DATA

- Case : Molded plastic,SOD-523
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

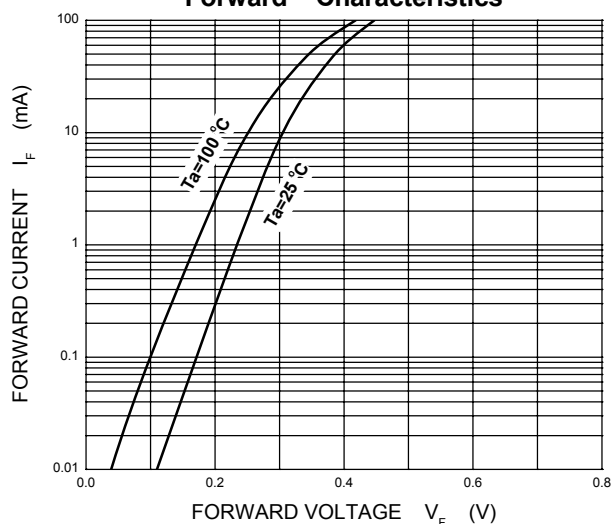
Parameter	Symbol	Limit	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.2	A
Peak forward surge current	I_{FSM}	1	A
Power Dissipation	P_D	150	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	667	°C/W
Operating temperature	T_J	-55~+125	°C
Storage temperature	T_{STG}	-55~+150	

Electrical Ratings @T_A=25°C

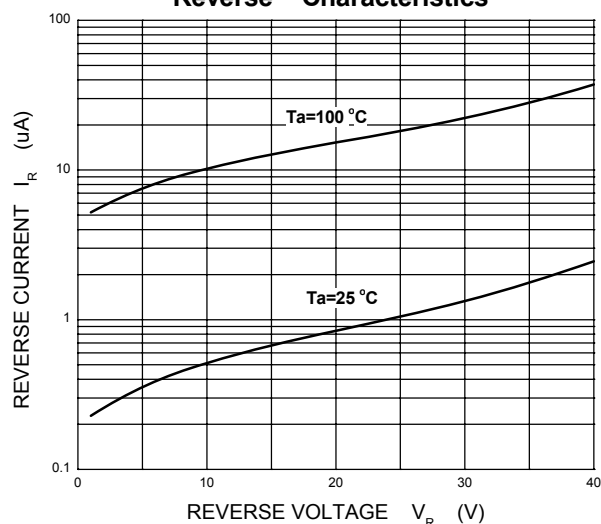
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			0.39 0.55	V	$I_F=10mA$ $I_F=100mA$
Reverse current	I_R			1 10	μA	$V_R=10V$ $V_R=40V$

Typical Characteristics

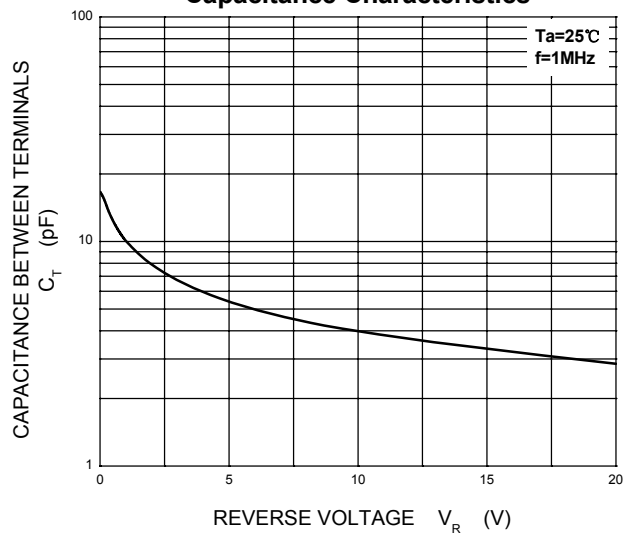
Forward Characteristics



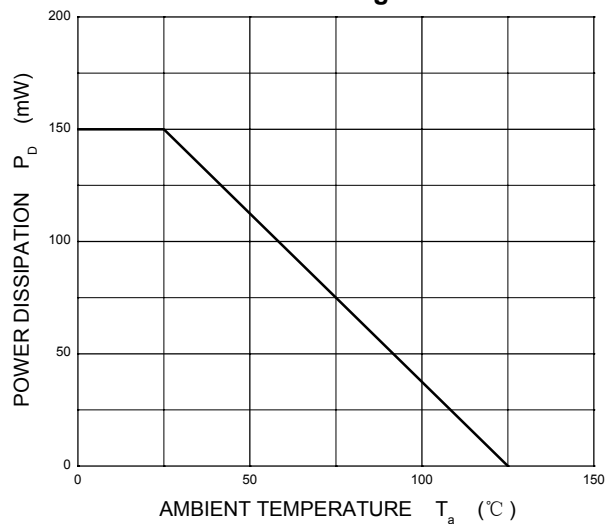
Reverse Characteristics



Capacitance Characteristics



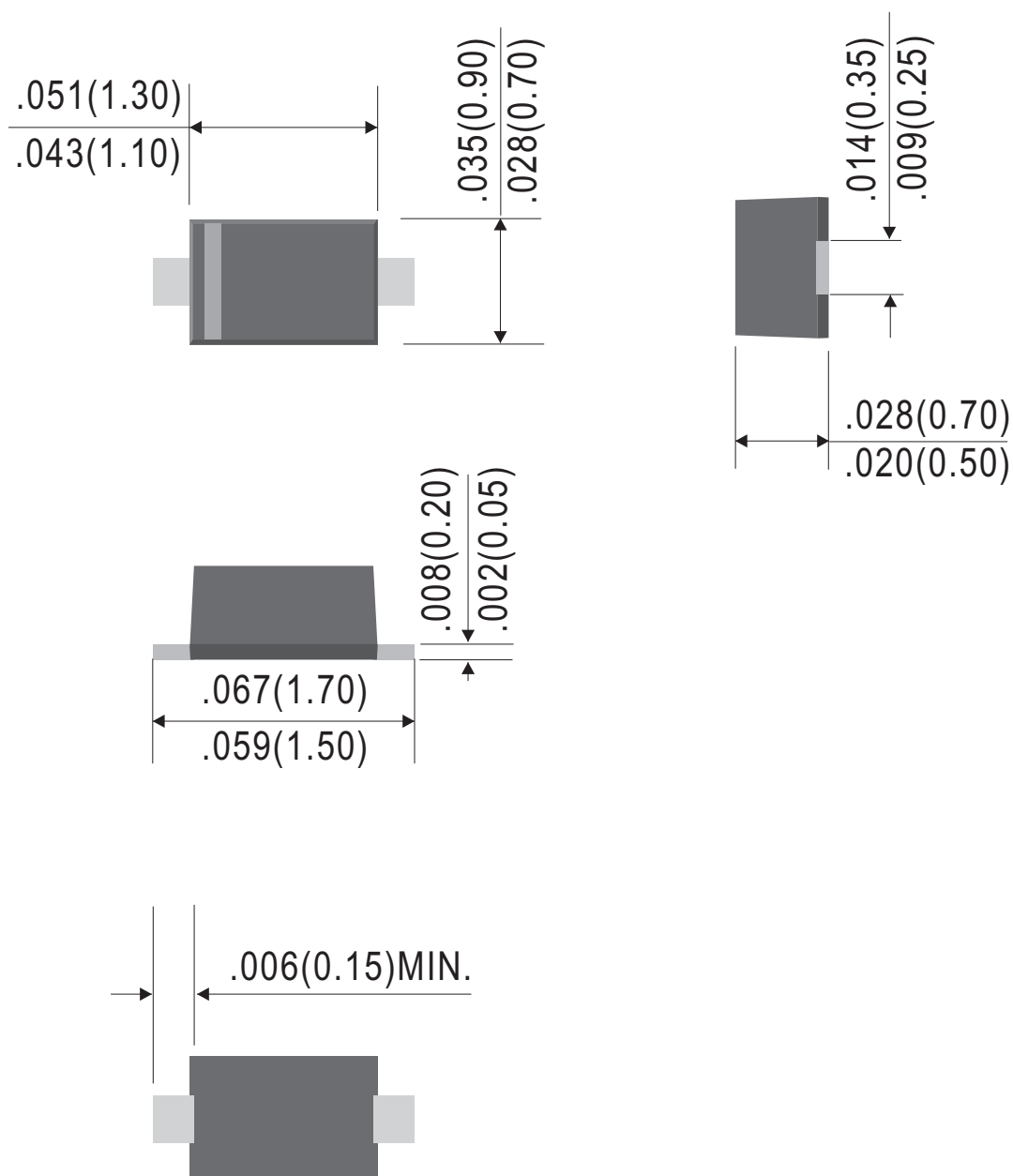
Power Derating Curve





Outline Drawing

SOD-523

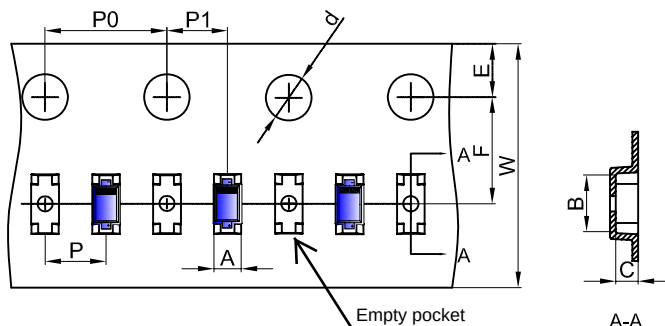


Dimensions in inches and (millimeters)

Rev.C

SOD-523 Tape and reel (Packing Code : T)

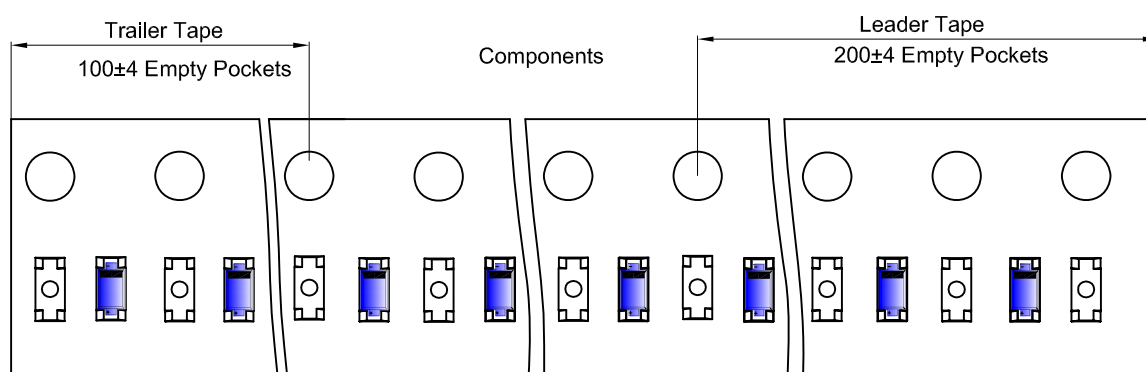
SOD-523 Embossed Carrier Tape



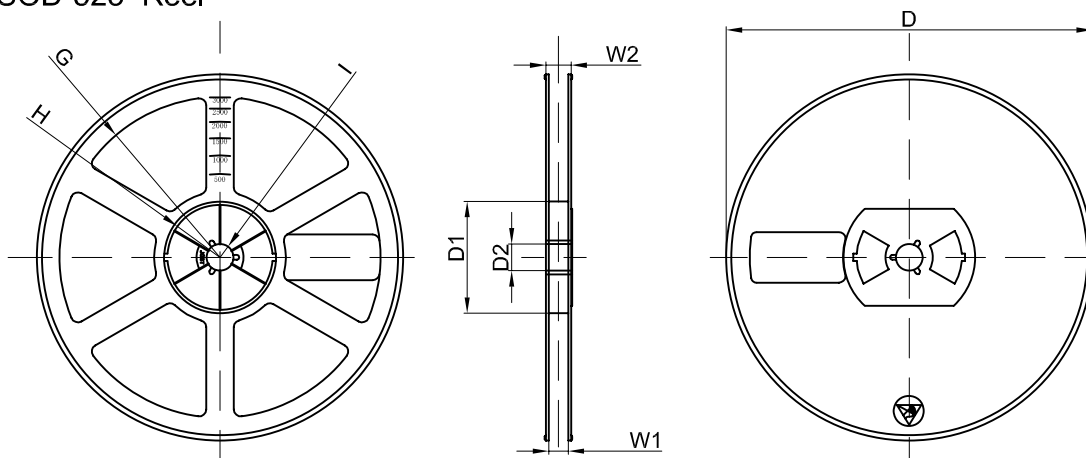
Packing Code	Reel	Reel Size
T	3,000 pcs	7 inch

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
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

SOD-523 Tape Leader and Trailer



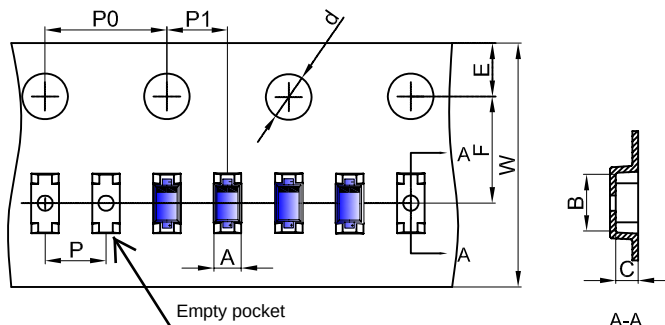
SOD-523 Reel



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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

SOD-523 Tape and reel (Packing Code : T2)

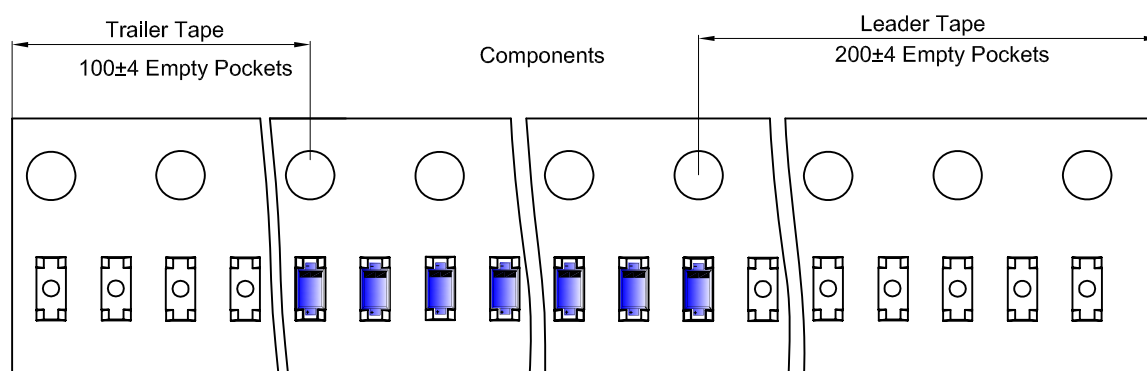
SOD-523 Embossed Carrier Tape



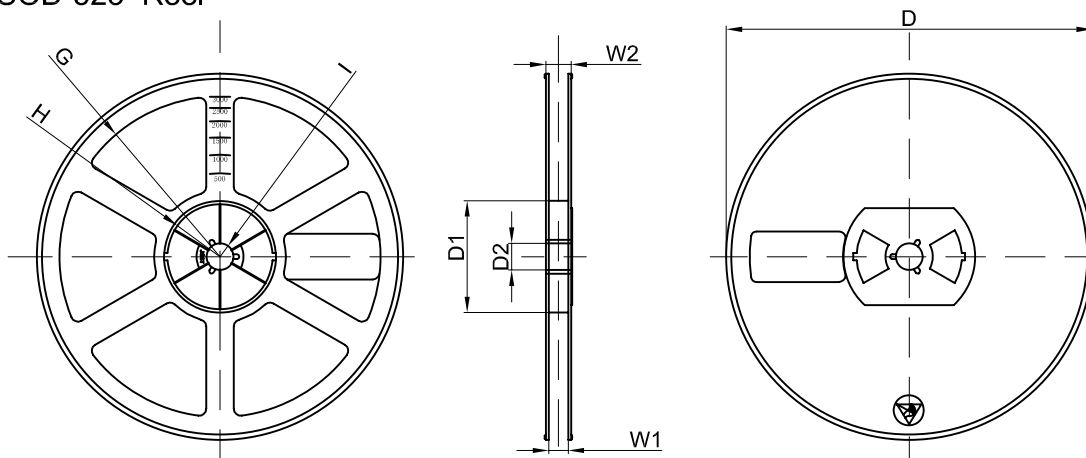
Packing Code	Reel	Reel Size
T2	8,000 pcs	7 inch

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
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

Ordering Information:

Device PN	Packing
SCS520S-40 -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel
SCS520S-40-T2 ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 8 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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