

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

for high speed switching and detection applications

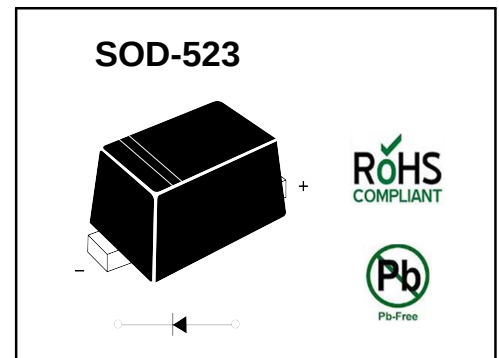
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Features

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

Marking Code: "D"



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

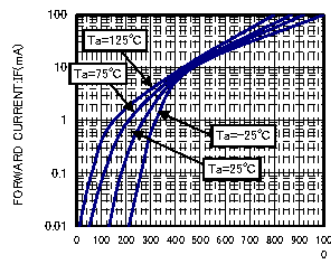
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	30	V
Mean Rectifying Current	I_O	30	mA
Peak Forward Surge Current (60 Hz, 1 Cycle)	I_{FSM}	200	mA
Junction Temperature	T_j	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^{\circ}\text{C}$

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

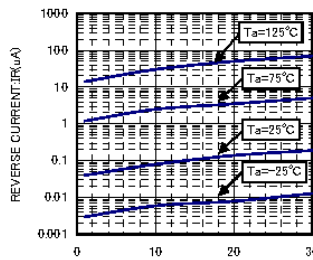
Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$	V_F	-	0.37	V
Reverse Current at $V_R = 30\text{ V}$	I_R	-	0.5	μA
Capacitance Between Terminals at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	2	-	pF

Note: ESD sensitive product handling required.

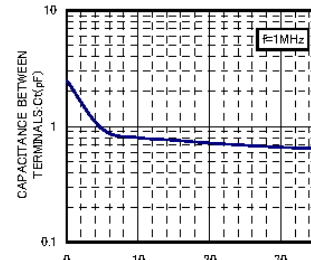
Typical Characteristics



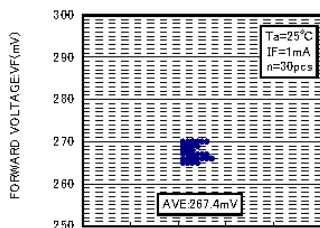
FORWARD VOLTAGE:VF(mV)
VF-IF CHARACTERISTICS
VF分布



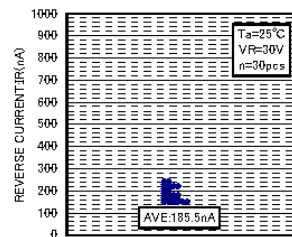
REVERSE VOLTAGE:VR(V)
VR-IR CHARACTERISTICS



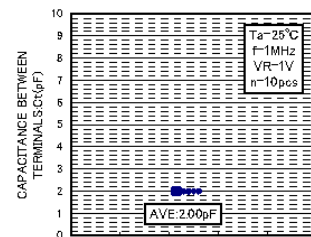
REVERSE VOLTAGE:VR(V)
VR-Ct CHARACTERISTICS



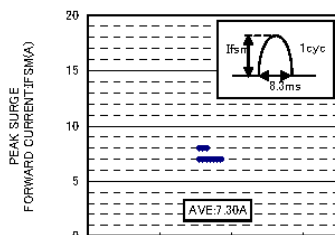
VF DISPERSION MAP



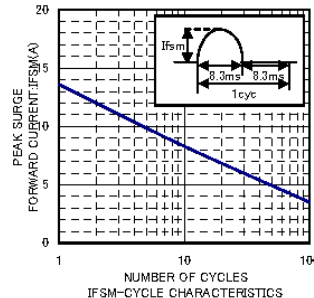
IR DISPERSION MAP



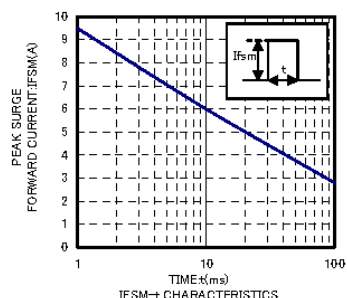
Ct DISPERSION MAP



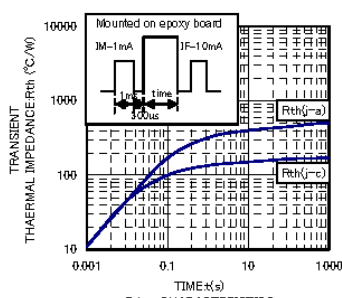
IFSM DISPERSION MAP



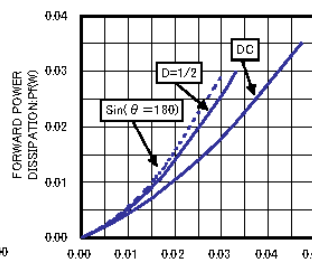
IFSM-CYCLE CHARACTERISTICS



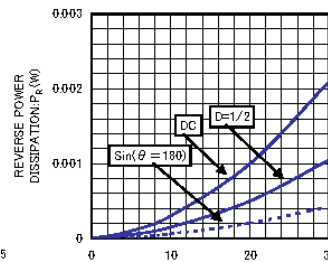
IFSM-t CHARACTERISTICS



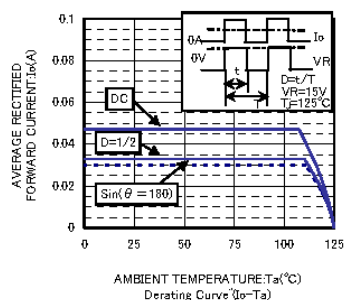
Rth-t CHARACTERISTICS



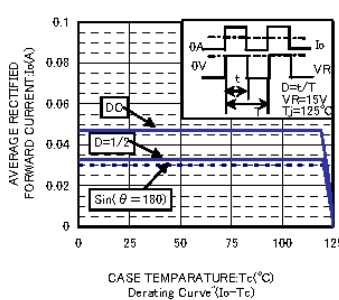
AVERAGE RECTIFIED
FORWARD CURRENT:Io(A)
Io-PF CHARACTERISTICS



REVERSE VOLTAGE:VR(V)
VR-Pk CHARACTERISTICS

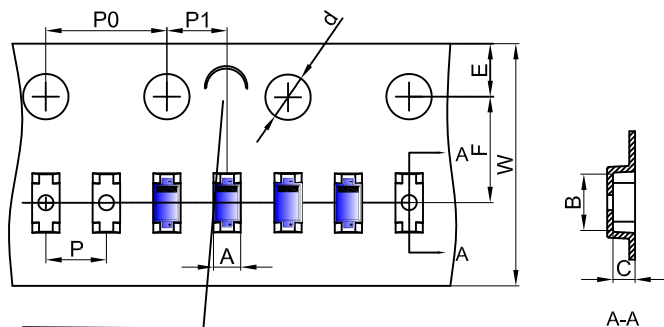


AMBIENT TEMPERATURE:Ta(°C)
Derating Curve (Io-Ta)



CASE TEMPERATURE:Tc(°C)
Derating Curve (Io-Tc)

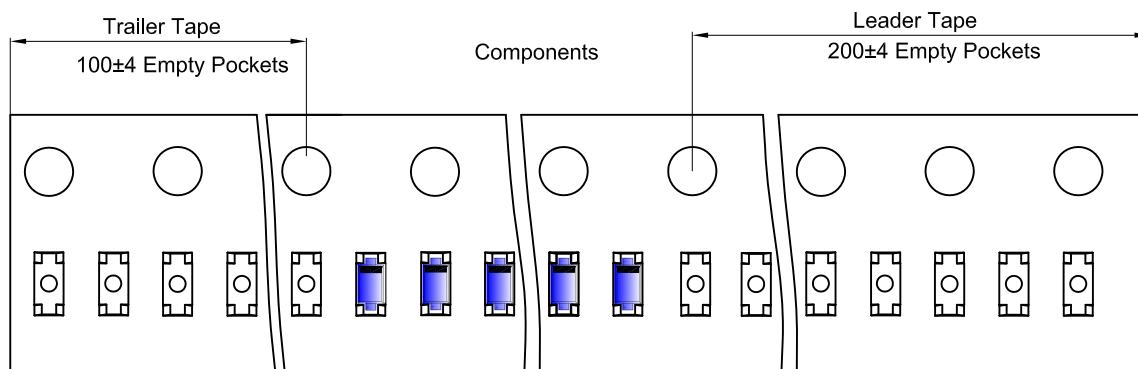
SOD-523 Embossed Carrier Tape



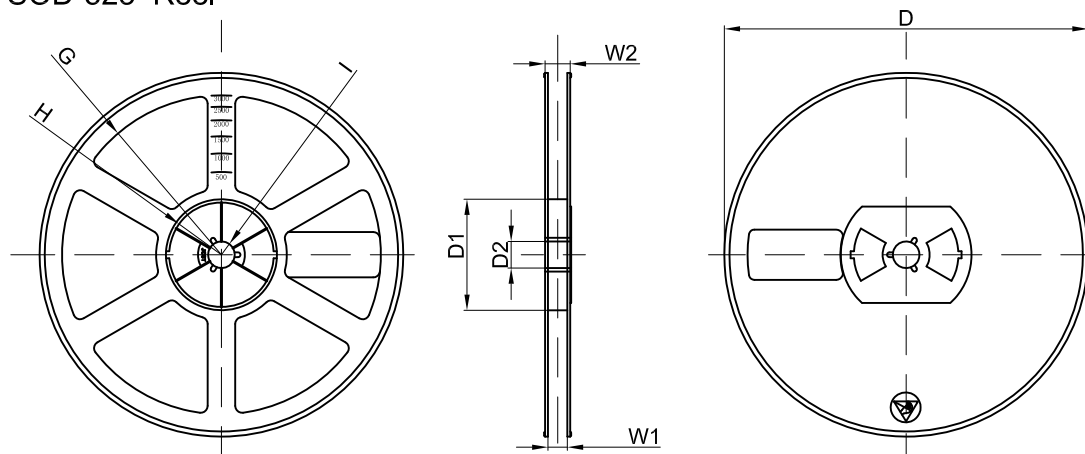
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

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



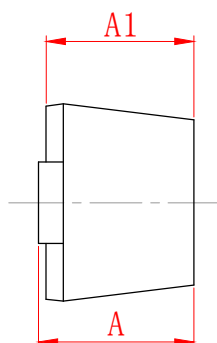
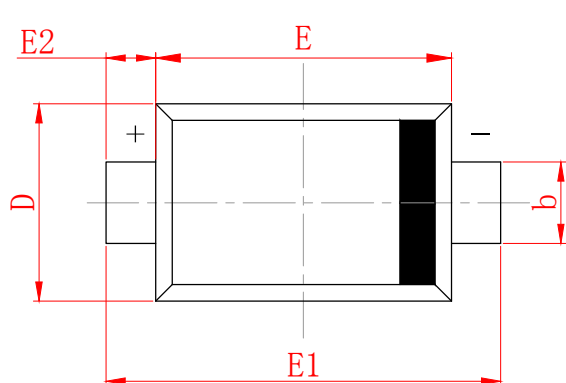
SOD-523 Reel



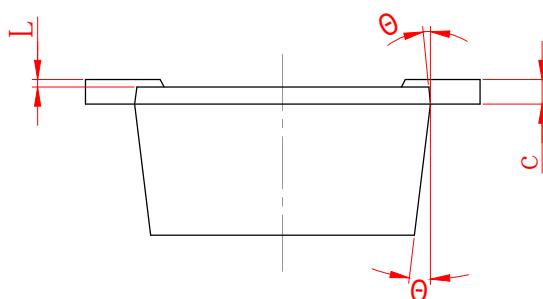
Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

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	

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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