

SMALL SIGNAL SCHOTTKY BARRIER DIODE

Features

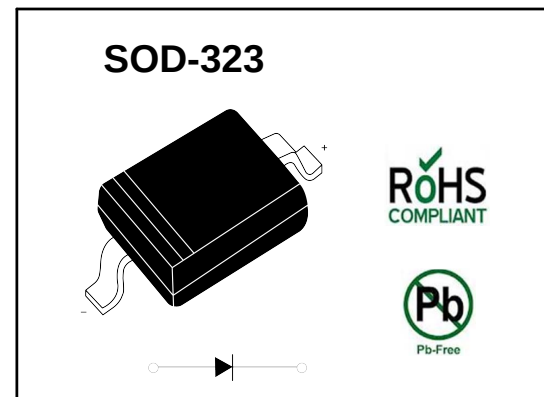
- Low Forward Voltage drop
- Surface mount device

Description

- High voltage schottky rectifier suited for SLIC protection during the card insertion operation

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Power Dissipation	P_{tot}	230	mW
Thermal Resistance Junction Ambient	R_{thJA}	550	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	V_{BR}	100	-	-	V
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 250\text{ mA}$	V_F	- - -	- - -	0.25 0.45 1	V
Reverse Current at $V_R = 1.5\text{ V}$ at $V_R = 10\text{ V}$ at $V_R = 50\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 1.5\text{ V}$, $T_J = 60\text{ }^{\circ}\text{C}$ at $V_R = 10\text{ V}$, $T_J = 60\text{ }^{\circ}\text{C}$ at $V_R = 50\text{ V}$, $T_J = 60\text{ }^{\circ}\text{C}$ at $V_R = 75\text{ V}$, $T_J = 60\text{ }^{\circ}\text{C}$	I_R	- - - - - - - -	- - - - - - - -	0.5 0.8 2 5 5 7.5 15 20	μA
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$ at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	- -	10 6	- -	pF

Typical Characteristics

Fig. 1: Forward current versus forward voltage at different temperatures (typical values).

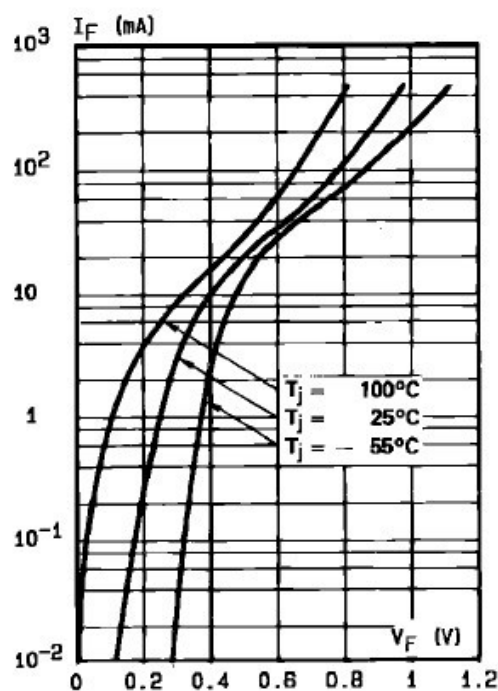


Fig. 2: Forward current versus forward voltage (typical values).

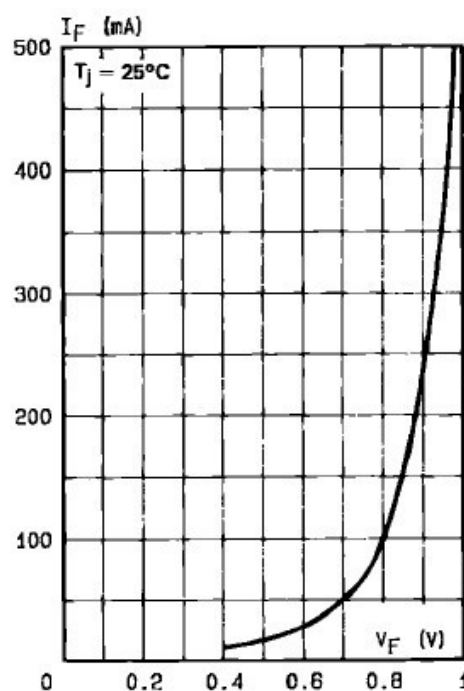


Fig. 3: Reverse current versus junction temperature (typical values).

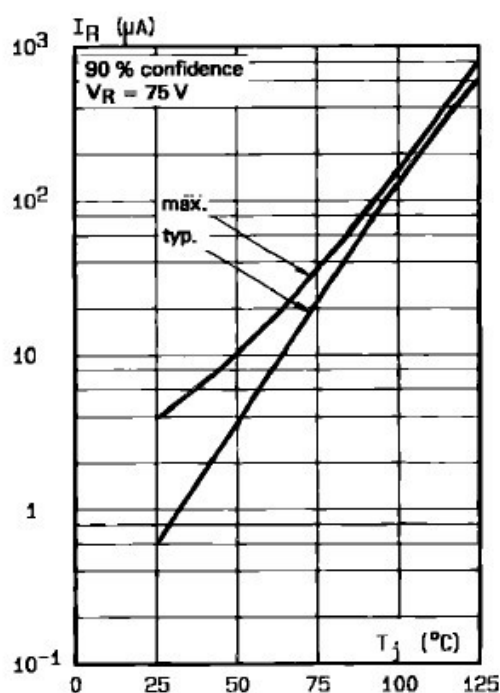
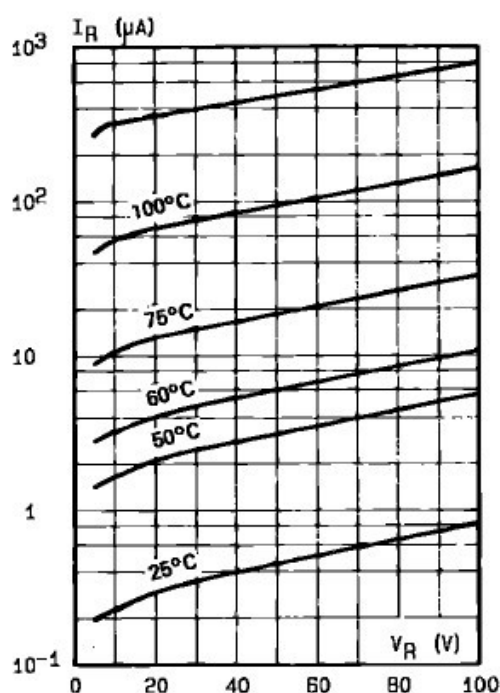
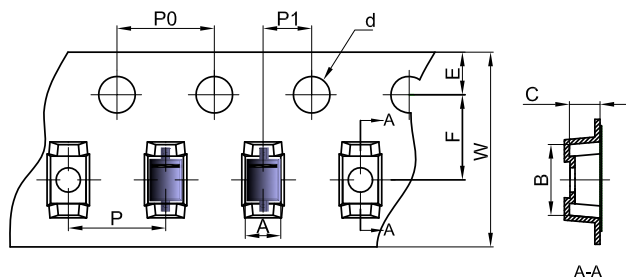


Fig. 4: Reverse current versus continuous reverse voltage (typical values).



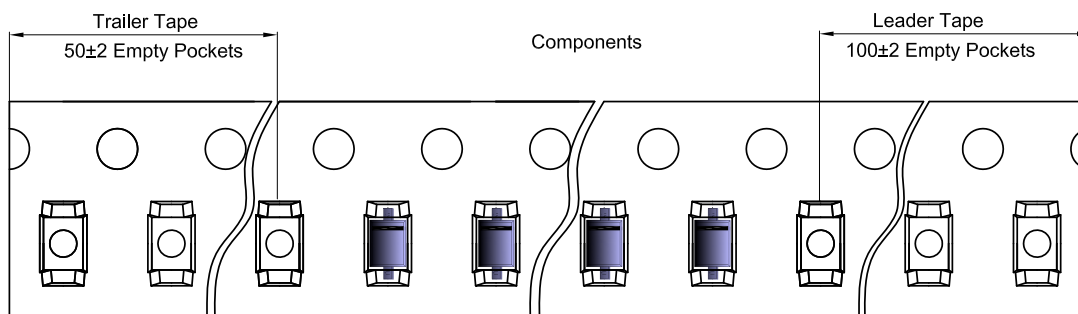
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

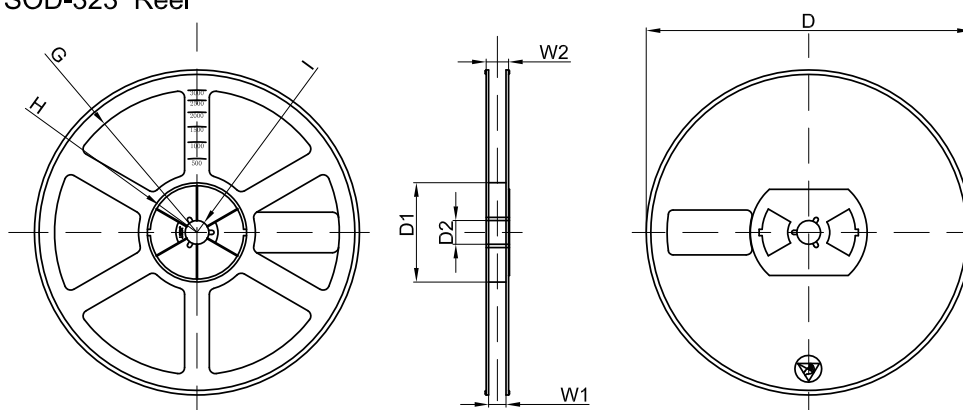


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



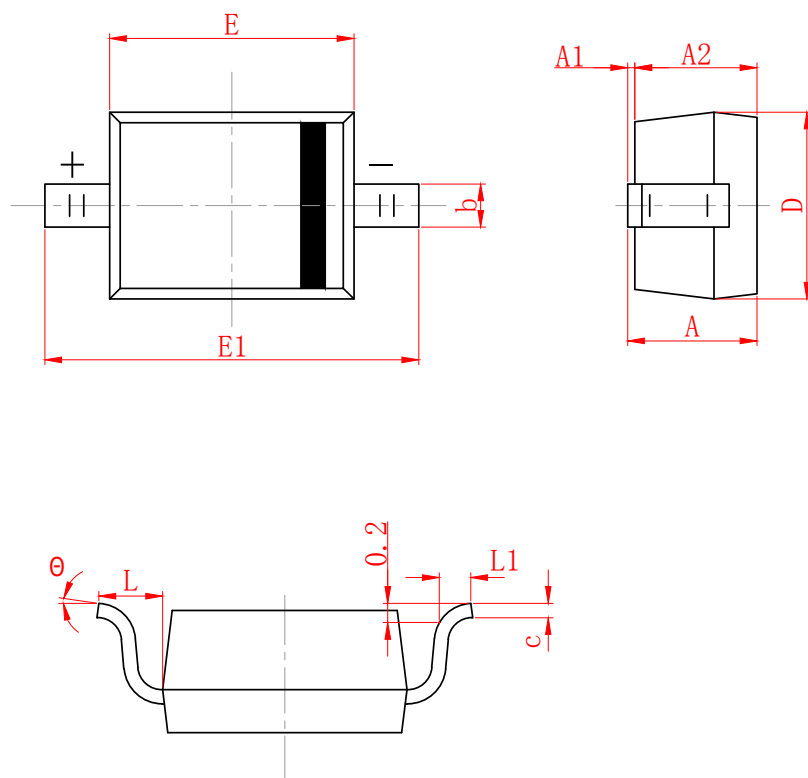
SOD-323 Reel



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)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

SOD-323 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.008	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 (REF)	
L1	0.250	0.400
θ	0°	8°

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