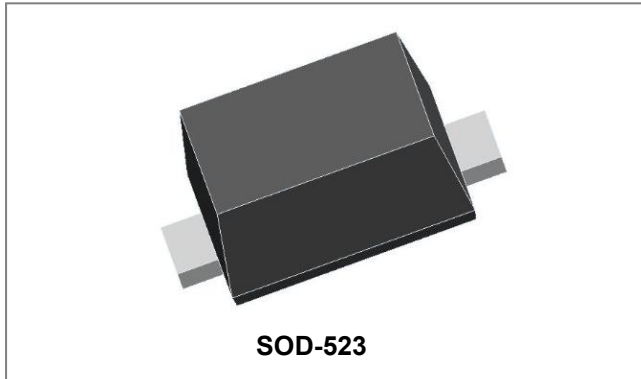


RB751S-40 SCHOTTKY BARRIER DIODE



Features

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

Circuit Diagram



Maximum Ratings@T_A=25°C unless otherwise specified

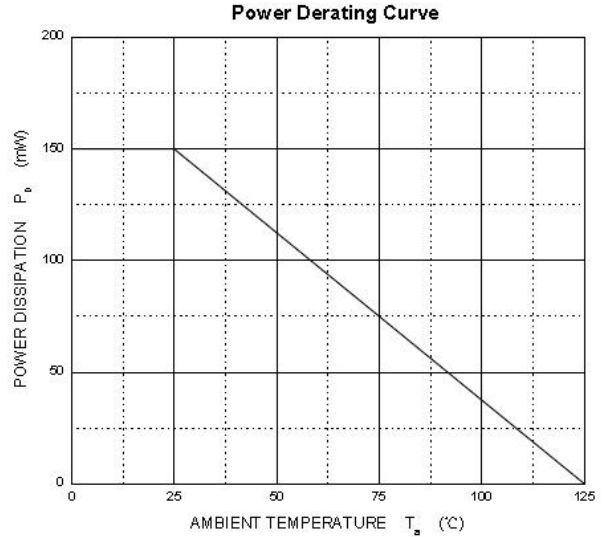
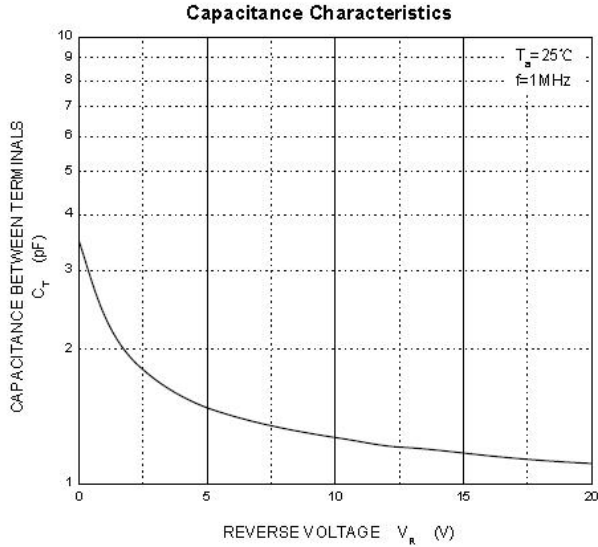
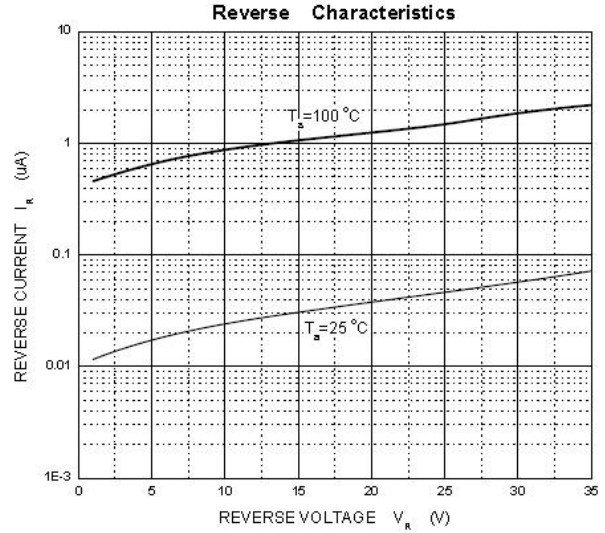
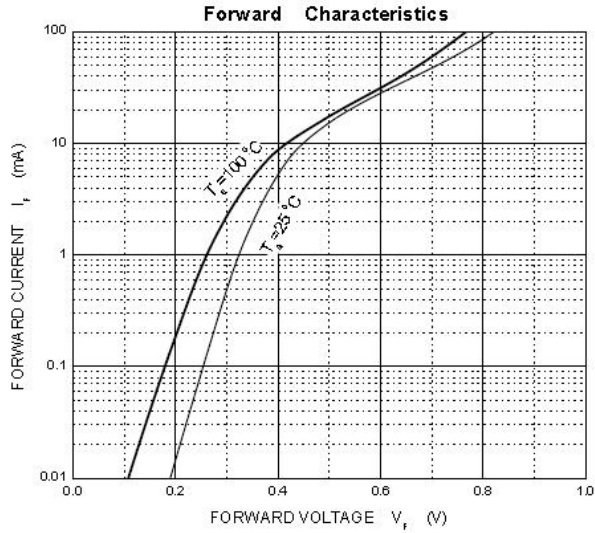
Parameter	Symbol	Value	Units
Peak Reverse Voltage	V _{RM}	40	V
DC Reverse Voltage	V _R	30	V
Mean rectifying current	I _O	30	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	200	mA
Power Dissipation	P _D	150	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	667	°C/W
Junction Temperature	T _j	125	°C
Storage Temperature	T _{stg}	-55~+150	°C

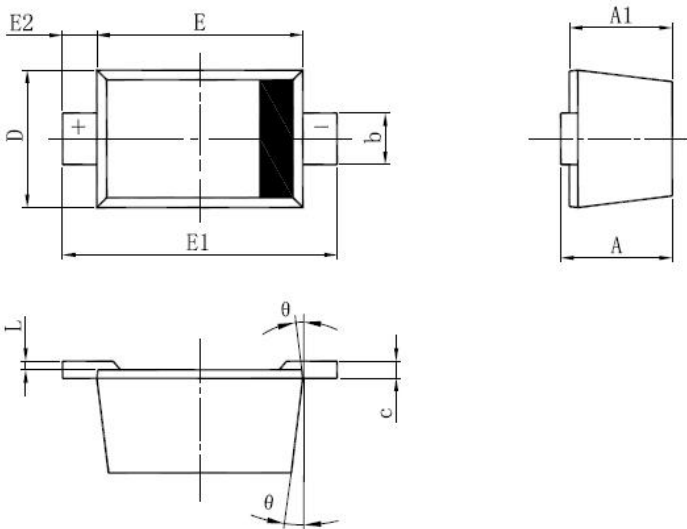
Electrical Characteristics@T_A=25°C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Units
Reverse current*	I _R	V _R =30V	-	-	0.5	μA
Forward voltage*	V _F	I _F =1mA	-	-	0.37	V
Capacitance between terminals	C _T	V _R =1V, f=1MHz	-	2	-	pF

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves



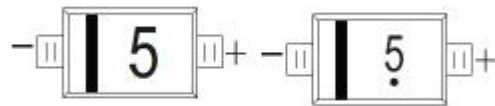
Mechanical Dimensions SOD-523


SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF.	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

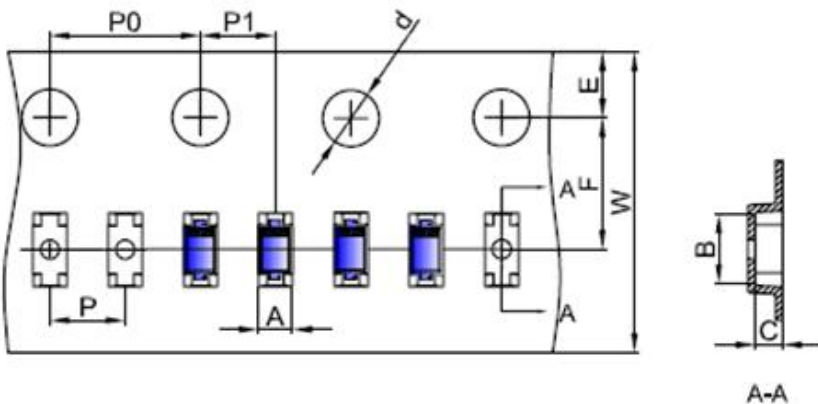
Ordering Information

Device	Package	Shipping
RB751S-40	SOD-523 (Pb-Free)	8000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram


The marking bar indicates the cathode
 Solid dot = Green molding compound device,
 if none, the normal device.

Carrier Tape & Reel Specification SOD-523


SYMBOL	Millimeters	
	Min.	Max.
A	0.85	0.95
B	1.89	1.99
C	0.68	0.78
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	1.90	2.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Diode Solutions sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment , and safety equipment) , safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement .
- 3- In no event shall SMC Diode Solutions be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Diode Solution assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Diode Solutions be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Diode Solutions.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Diode Solutions.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..