



# RB521S-40H

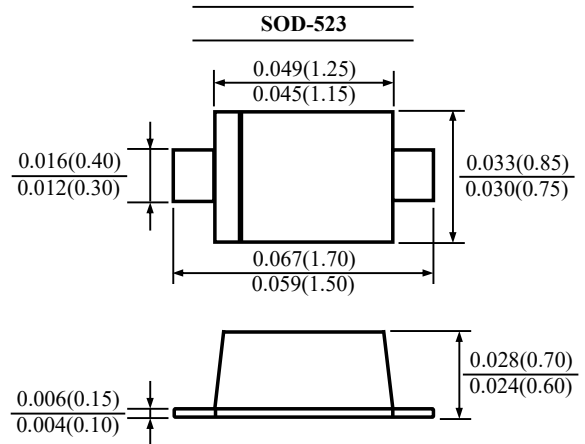
## SCHOTTKY DIODE

### FEATURES

- Low forward voltage
- Suffix "H" indicates Halogen-free parts, ex. RB521S-40H

### MECHANICAL DATA

Case : SOD-523  
 Epoxy : UL 94V-O rate flame retardant  
 Polarity : Indicated by cathode band  
 Mounting position : Any



**Dimensions in inch and (millimeter)**

### Maximum Ratings@ $T_A=25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RM}$	45	V
Reverse Voltage	$V_R$	40	V
Average Forward Current	$I_{F(AV)}$	200	mA
Peak Forward Surge Current (60Hz for cycle)	$I_{FSM}$	1	A
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +125	$^\circ\text{C}$

### Electrical Characteristics@ $T_A=25\text{ }^\circ\text{C}$

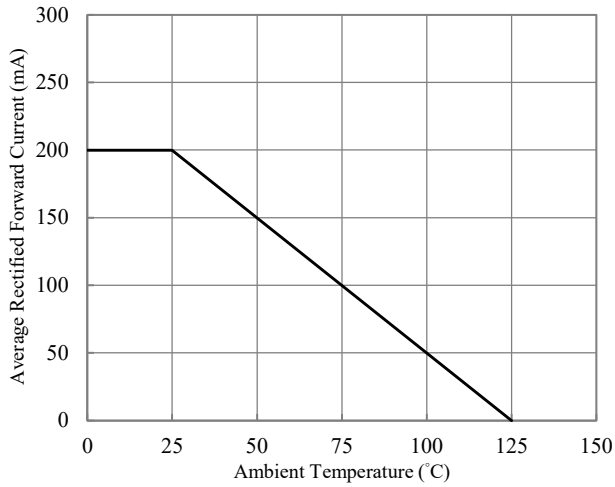
Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	$I_F=10\text{mA}$	$V_F$	0.16	-	0.30	V
	$I_F=100\text{mA}$		0.31	-	0.45	
	$I_F=200\text{mA}$		0.41	-	0.54	
Reverse Leakage Current	$V_R=10\text{V}$	$I_R$	-	-	20	$\mu\text{A}$
	$V_R=40\text{V}$		-	-	90	



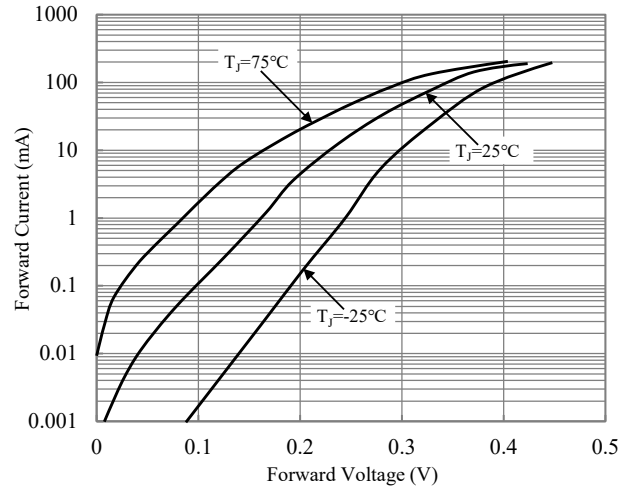
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## SCHOTTKY DIODE

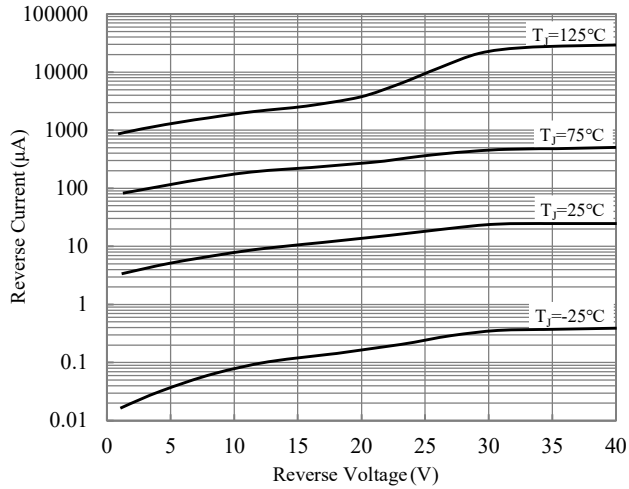
### RATINGS AND CHARACTERISTIC CURVES



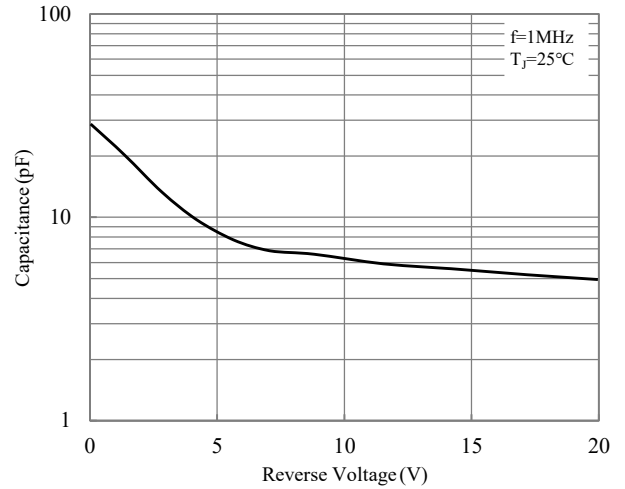
**Fig. 1 Power Derating Curves**



**Fig. 2 Forward Characteristics**



**Fig. 3 Reverse Characteristics**



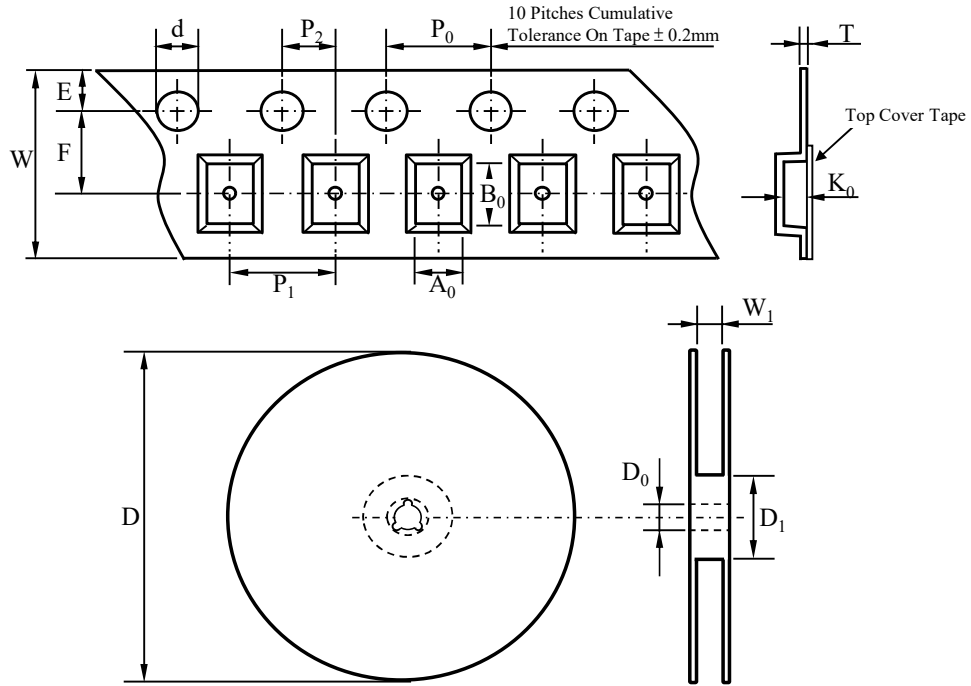
**Fig. 4 Capacitance Characteristics**



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### TAPE & REEL SPECIFICATION



Item	Symbol	SOD-523
Carrier width	$A_0$	*
Carrier length	$B_0$	
Carrier depth	$K_0$	
Sprocket hole	d	$1.50 \pm 0.10$
Reel outside diameter	D	$178.00 \pm 2.00$
Feed hole width	$D_0$	$13.00 \pm 0.50$
Reel inner diameter	$D_1$	MIN. 50.00
Sprocket hole position	E	$1.75 \pm 0.10$
Punch hole position	F	$3.50 \pm 0.10$
Sprocket hole pitch	$P_0$	$4.00 \pm 0.10$
Punch hole pitch	$P_1$	$4.00 \pm 0.10$
Embossment center	$P_2$	$2.00 \pm 0.10$
Overall tape thickness	T	MAX. 0.60
Tape width	W	$8.00 \pm 0.20$
Reel width	$W_1$	MAX. 10.00

Note \*:  $A_0$ ,  $B_0$ , and  $K_0$  are determined by component size. The clearance between the components and the cavity must be within 0.05 mm min. to 0.5 mm max.

### ORDER INFORMATION

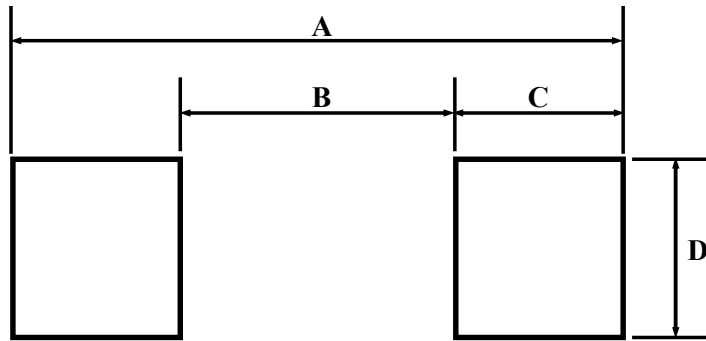
Part Number	Marking Code	Reel Size	Quantity
RB521S-40H	Z	7"	4,000



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### SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-523	2.30	1.10	0.60	0.80