



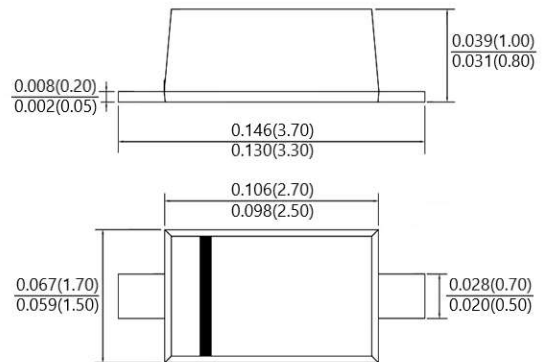
# B5819WH

## SCHOTTKY DIODES

### FEATURES

- Low Forward Voltage Drop
- Surface Device Type Mounting
- Suffix "H" indicates Halogen-free parts, ex.B5819WH

### SOD-123FL



Dimensions in inch and (millimeter)

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

Parameter	Symbol	Value	Unit
Power Dissipation	$P_D$	500	mW
Repetitive Peak Reverse Voltage	$V_{RM}$	40	V
Average Rectified Output Current	$I_O$	1	A
Peak Forward Surge Current (at 8.3ms single half sine-wave)	$I_{FSM}$	9	A
Operating Junction Temperature Range	$T_J$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +125	$^\circ\text{C}$

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

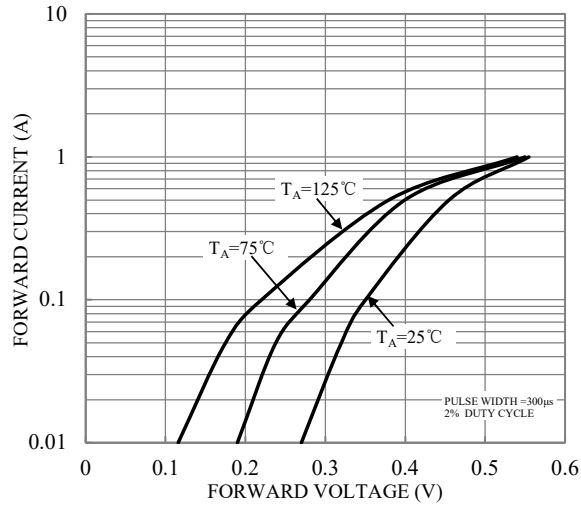
Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R=1\text{ mA}$	$V_{BR}$	40	-	V
Reverse Leakage Current	$V_R=40\text{ V}$	$I_R$	-	1	mA
Forward Voltage	$I_F=1\text{ A}$	$V_F$	-	0.6	V
	$I_F=3\text{ A}$		-	0.9	
Diode Capacitance	$V_R=4\text{ V}, f=1\text{ MHz}$	$C_d$	-	120	pF



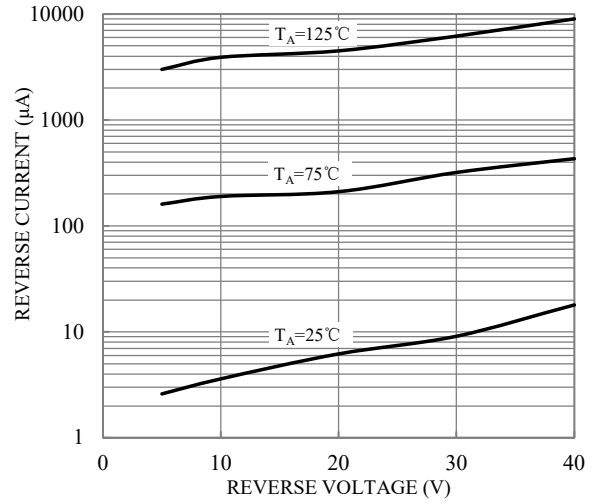
# B5819WH

## SCHOTTKY DIODES

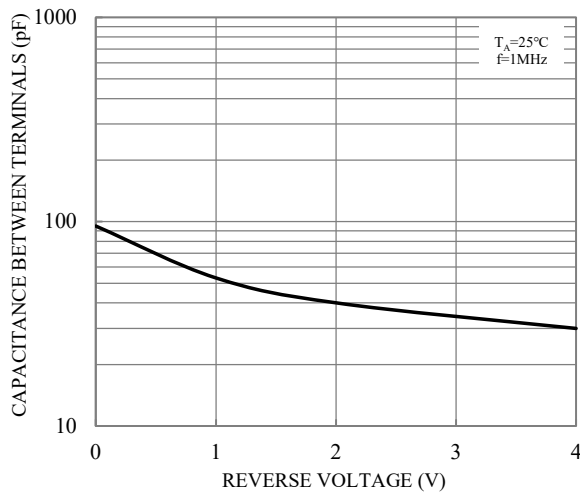
### Typical Characteristics



**Fig.1-TYPICAL FORWARD CHARACTERISTICS**



**Fig.2-TYPICAL REVERSE CHARACTERISTICS**



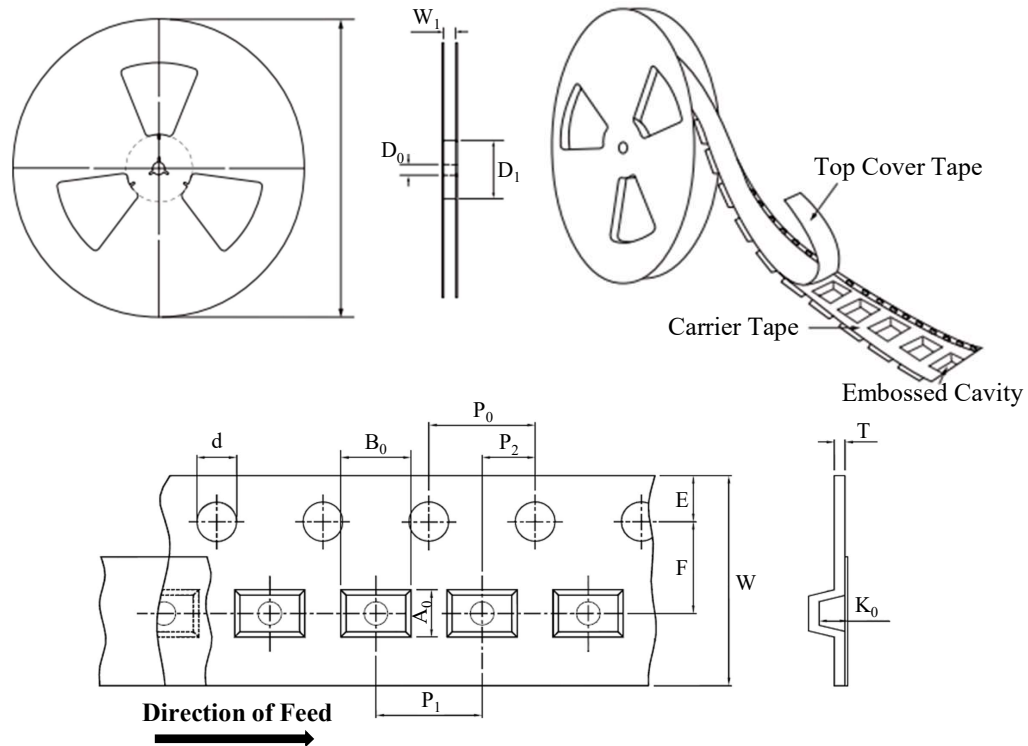
**Fig.3-TOTAL CAPACITANCE**



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## SCHOTTKY DIODES

### TAPE & REEL SPECIFICATION



Item	Symbol	SOD-123FL
Carrier width	$A_0$	1.85 ± 0.10
Carrier length	$B_0$	3.94 ± 0.10
Carrier depth	$K_0$	1.58 ± 0.10
Sprocket hole	$d$	1.50 ± 0.10
Reel outside diameter	$D$	178.00 ± 2.00
Feed hole width	$D_0$	13.00 ± 0.50
Reel inner diameter	$D_1$	MIN. 50.00
Sprocke hole position	$E$	1.75 ± 0.10
Punch hole position	$F$	3.50 ± 0.10
Sprocke hole pitch	$P_0$	4.00 ± 0.10
Punch hole pitch	$P_1$	4.00 ± 0.10
Embossment center	$P_2$	2.00 ± 0.10
Overall tape thickness	$T$	0.25 ± 0.05
Tape width	$W$	8.00 ± 0.30
Reel width	$W_1$	MAX. 11.00

### ORDER INFORMATION

Package	Reel Size	Quantity
SOD-123FL	7"	3,000

### MARKING CODE

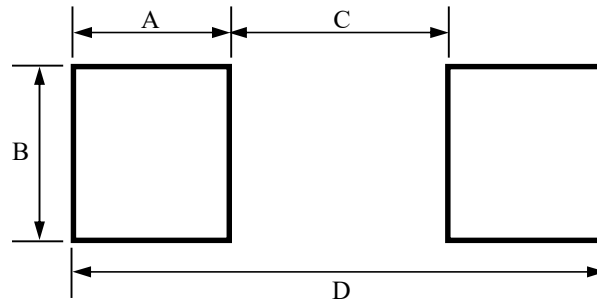
Part Number	Marking Code
B5819WH	SL



# B5819WH

## SCHOTTKY DIODES

### SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-123FL	1.05	1.40	2.40	4.50