

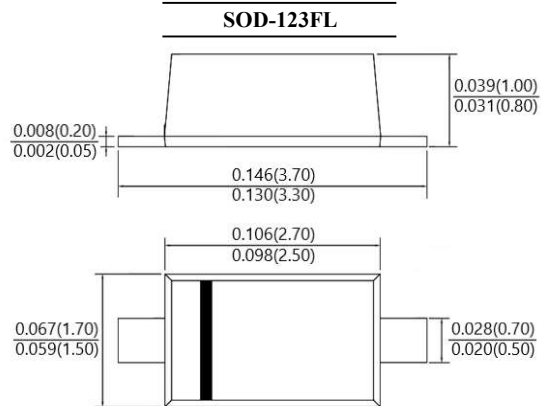


B5819W

SCHOTTKY DIODES

FEATURES

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



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



B5819W

SCHOTTKY DIODES

Typical Characteristics

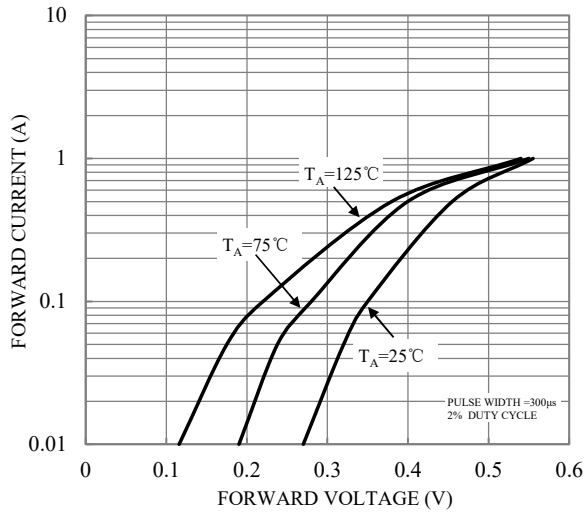


Fig.1-TYPICAL FORWARD CHARACTERISTICS

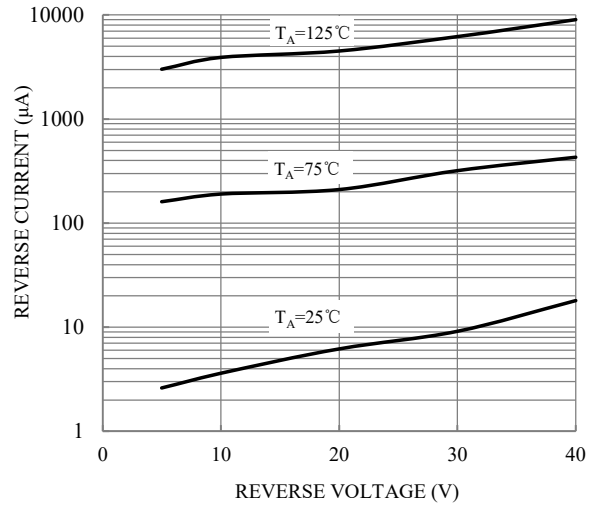


Fig.2-TYPICAL REVERSE CHARACTERISTICS

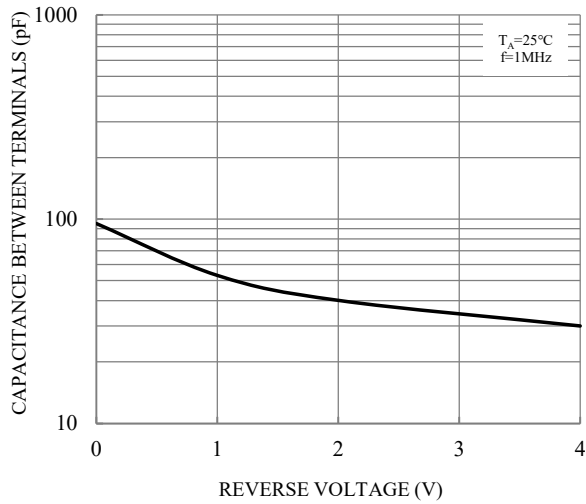


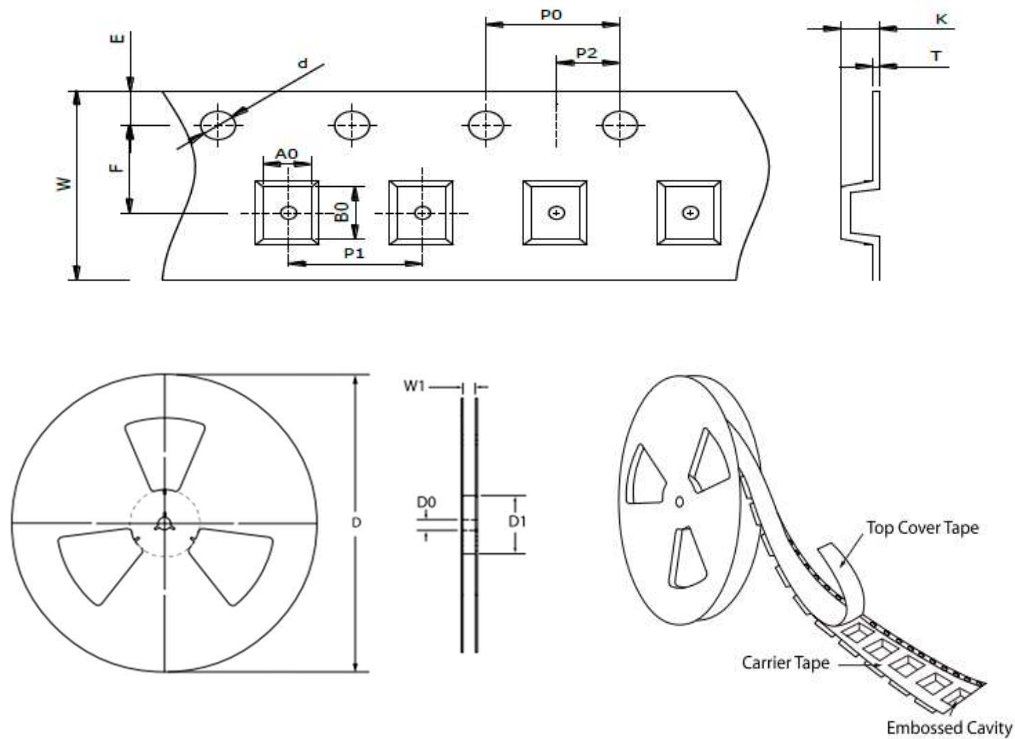
Fig.3-TOTAL CAPACITANCE



B5819W

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	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
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket 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

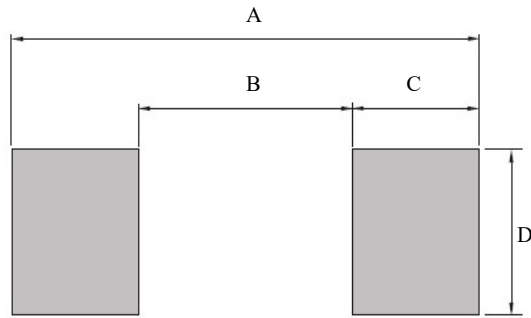
Part Number	Marking Code
B5819W	SL



B5819W

SCHOTTKY DIODES

SUGGESTED SOLDER PAD LAYOUT



Unit : mm

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