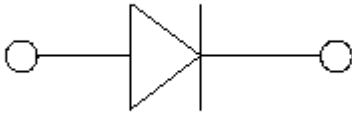


## Schottky Barrier Rectifier

### Features

- $V_R$  20V/30V/40V
- $I_{FAV}$  1A



### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
B5817WS	SJ
B5818WS	SK
B5819WS	SL

### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Repetitive peak reverse voltage	$V_{RRM}$	V		B5817WS	20
				B5818WS	30
				B5819WS	40
Reverse voltage	$V_R$	V	$I_R=1mA$	B5817WS	20
				B5818WS	30
				B5819WS	40
Peak forward surge current	$I_{FSM}$	A	$t_p=8.3ms$ , half sine	10	
Average forward current	$I_{FAV}$	A	$T_c=90^\circ C$	1	
Maximum junction temperature	$T_j$	$^\circ C$		-65 to +125	
Storage temperature range	$T_{stg}$	$^\circ C$		-65 to +150	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	$^\circ C/W$		500	



# B5817WS THRU B5819WS

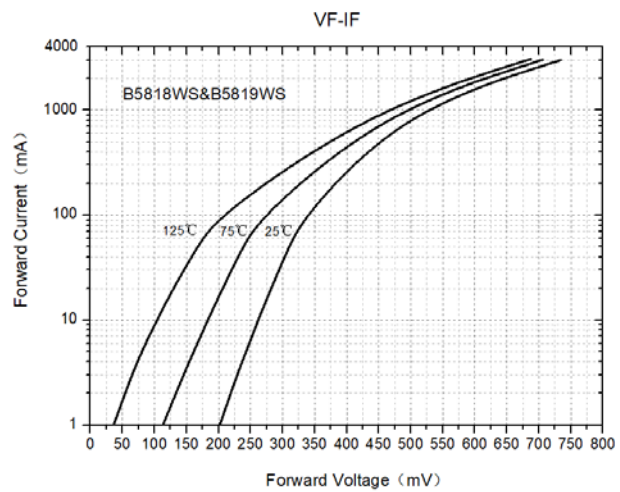
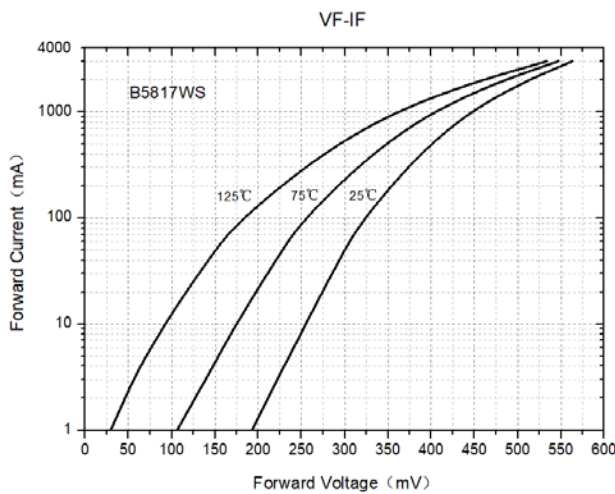
## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions		VALUE	
Maximum Forward voltage	V <sub>F</sub>	V	I <sub>F</sub> =1A, T <sub>J</sub> =25°C	B5817WS	0.45	
				B5818WS	0.55	
				B5819WS	0.60	
	V <sub>F</sub>	V	I <sub>F</sub> =3A, T <sub>J</sub> =25°C	B5817WS	0.75	
				B5818WS	0.875	
				B5819WS	0.90	
Maximum Reverse current	I <sub>R</sub>	μA	B5817WS	V <sub>R</sub> =20V, T <sub>A</sub> =25°C	200	
			B5818WS	V <sub>R</sub> =30V, T <sub>A</sub> =25°C	40	
			B5819WS	V <sub>R</sub> =40V, T <sub>A</sub> =25°C	40	
Minimum Breakdown voltage	V <sub>(BR)</sub>	V	I <sub>R</sub> =1mA	B5817WS	20	
				B5818WS	30	
				B5819WS	40	
Maximum Diode capacitance	C <sub>D</sub>	pF	V <sub>R</sub> =4V, f =1MHz		120	

## ■ Ordering Information (Example)

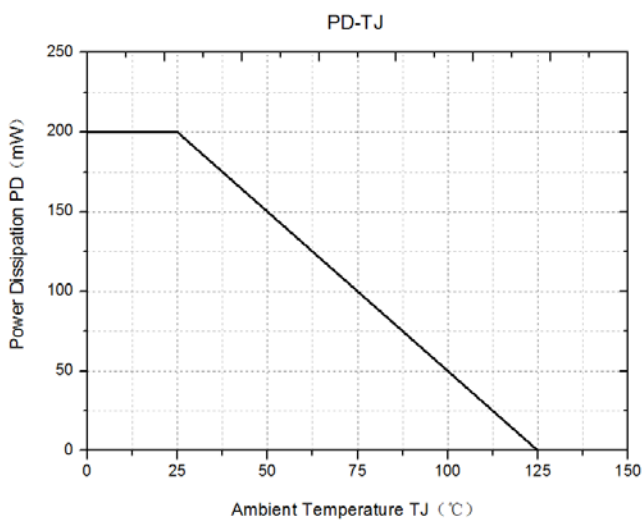
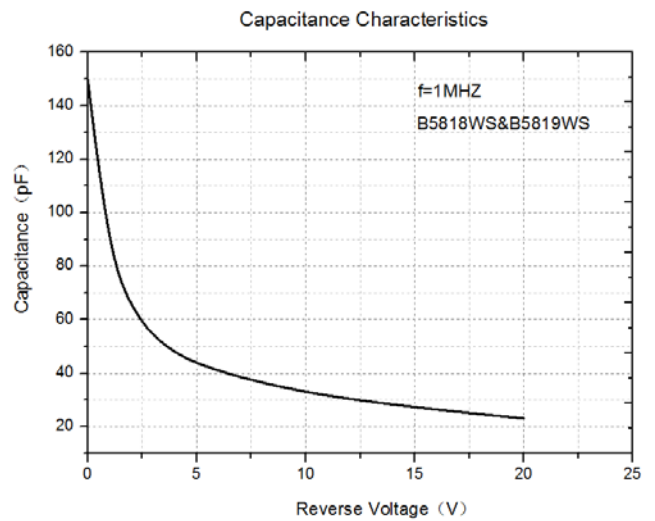
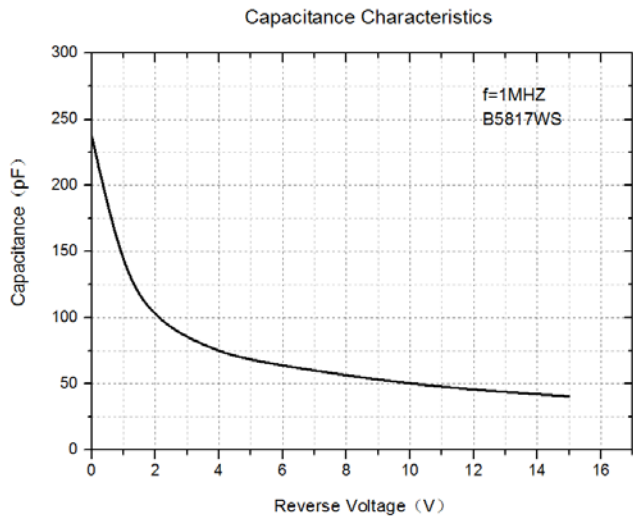
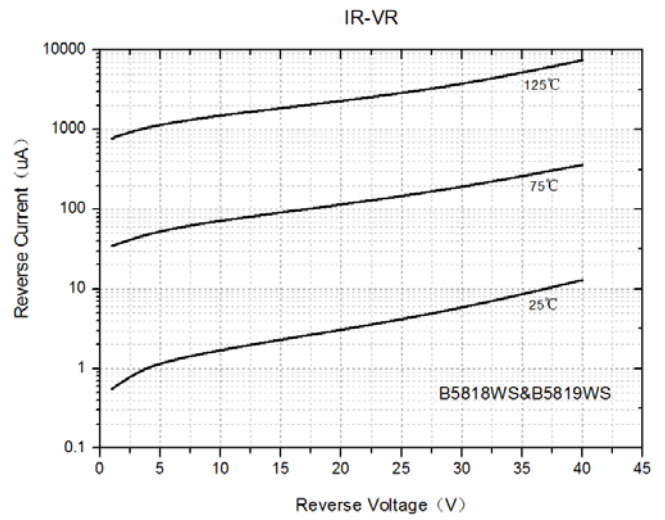
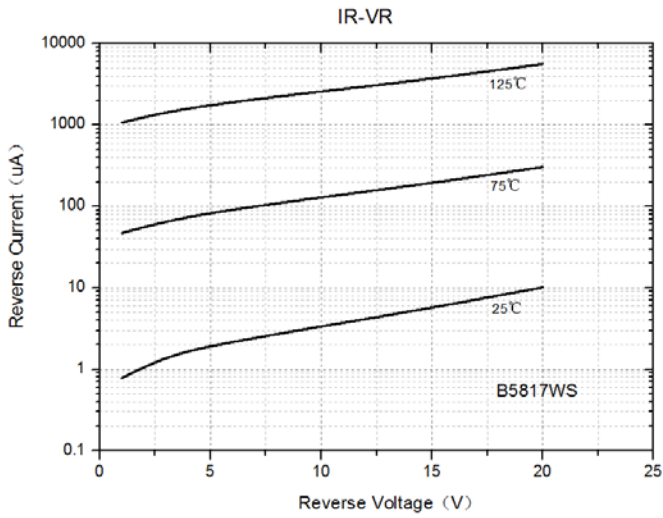
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B5817WS Thru B5819WS	F2	Approximate 0.004	3000	30000	120000	7" reel

## ■ Characteristics (Typical)





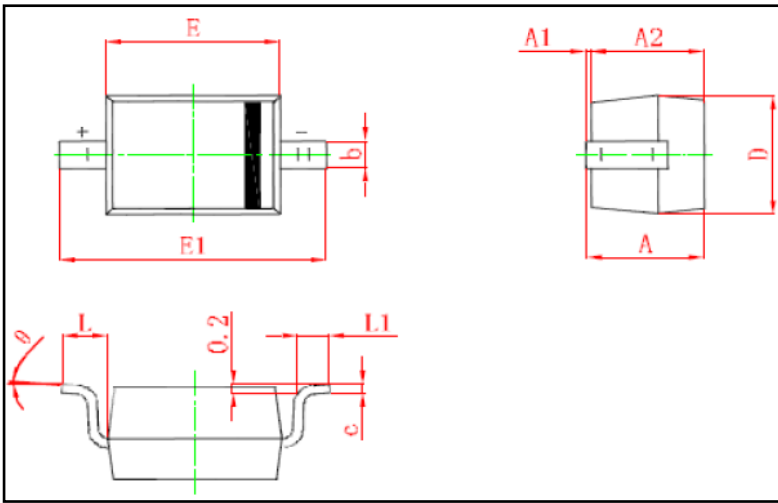
# B5817WS THRU B5819WS





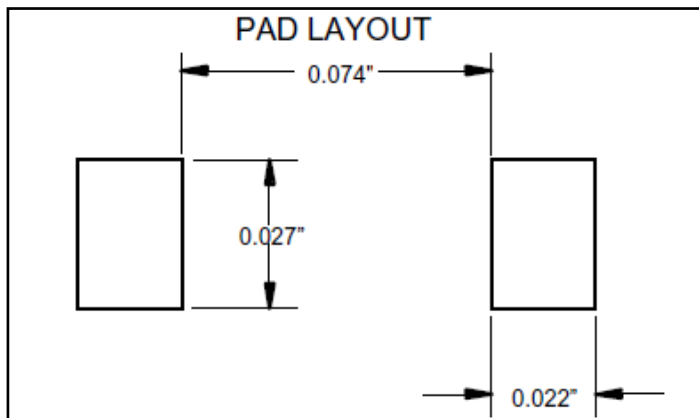
# B5817WS THRU B5819WS

## ■ Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
$\theta$	0°	8°

## ■ Soldering Footprint



Unit: inches



## B5817WS THRU B5819WS

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