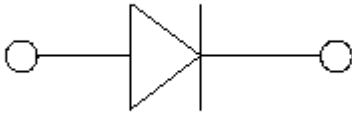


Schottky Barrier Rectifier

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	°C		-65 to +125	
Storage temperature range	T_{stg}	°C		-65 to +150	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C /W		500	

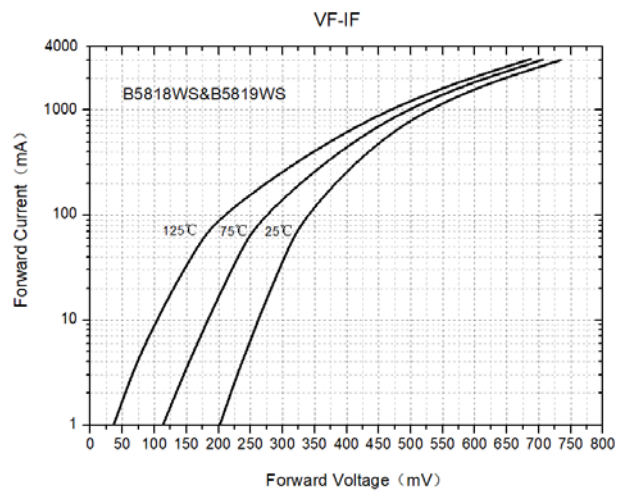
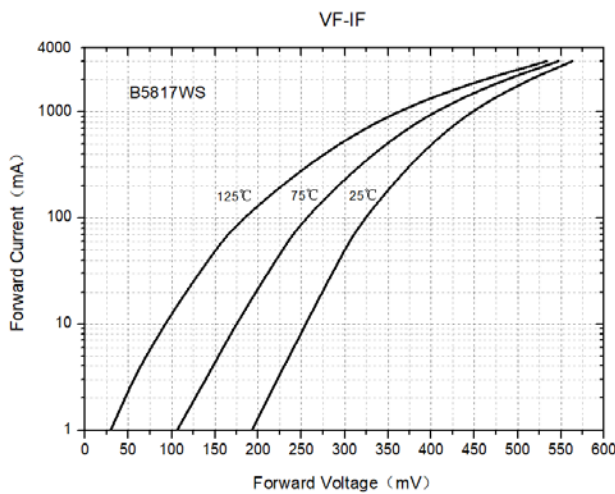
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

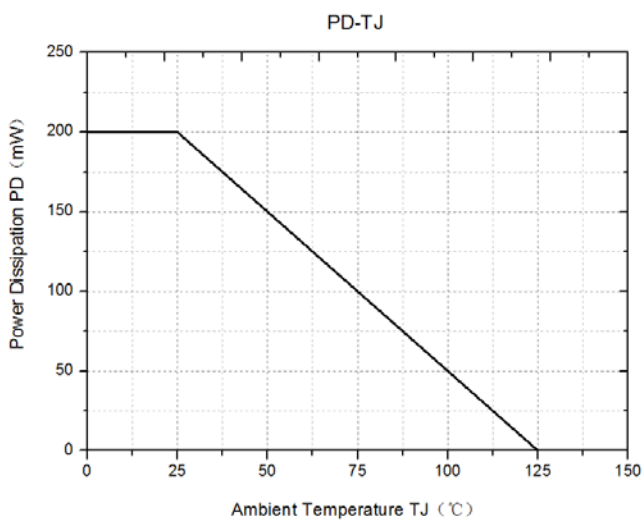
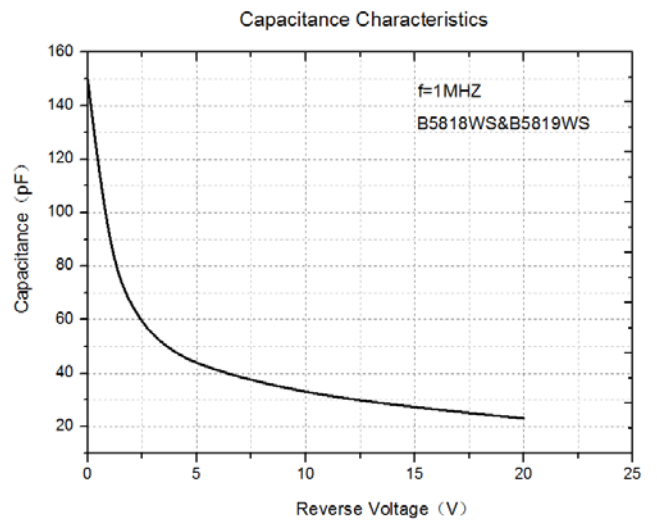
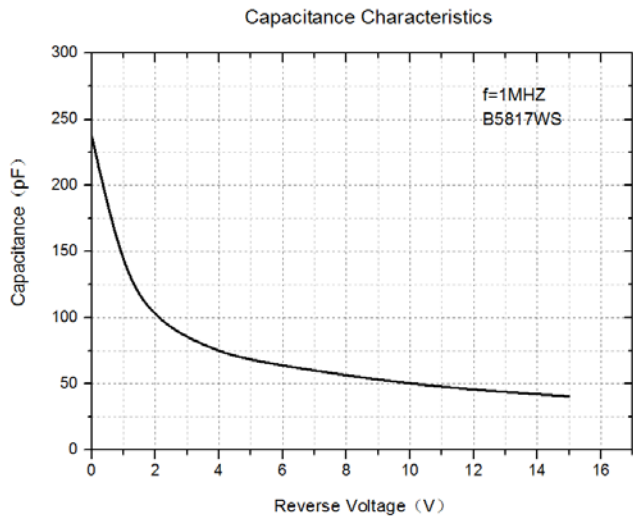
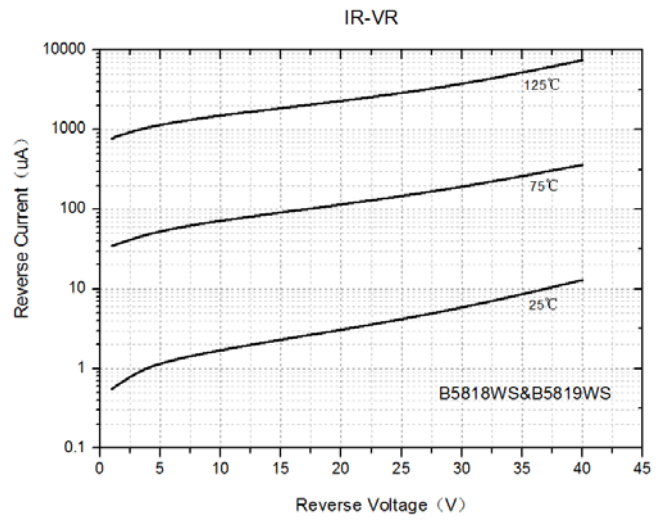
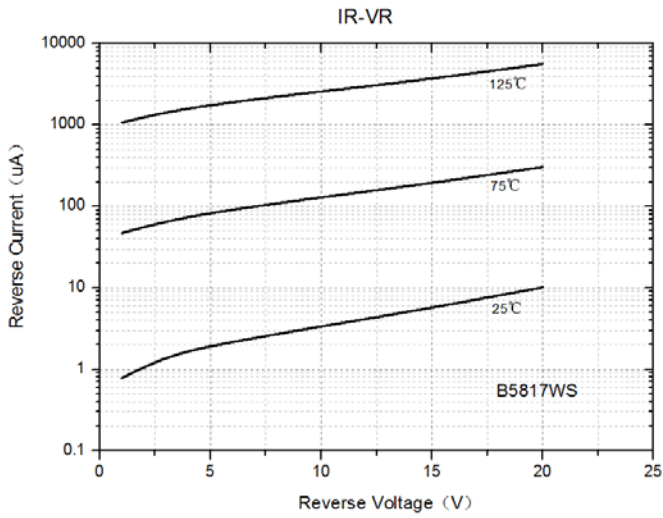
PARAMETER	SYMBOL	UNIT	Conditions		VALUE	
Maximum Forward voltage	V _F	V	I _F =1A, T _J =25°C	B5817WS	0.45	
				B5818WS	0.55	
				B5819WS	0.60	
	V _F	V	I _F =3A, T _J =25°C	B5817WS	0.75	
				B5818WS	0.875	
				B5819WS	0.90	
Maximum Reverse current	I _R	μA	B5817WS	V _R =20V, T _A =25°C	200	
			B5818WS	V _R =30V, T _A =25°C	40	
			B5819WS	V _R =40V, T _A =25°C	40	
Minimum Breakdown voltage	V _(BR)	V	I _R =1mA	B5817WS	20	
				B5818WS	30	
				B5819WS	40	
Maximum Diode capacitance	C _D	pF	V _R =4V, f=1MHz		120	

■ Ordering Information (Example)

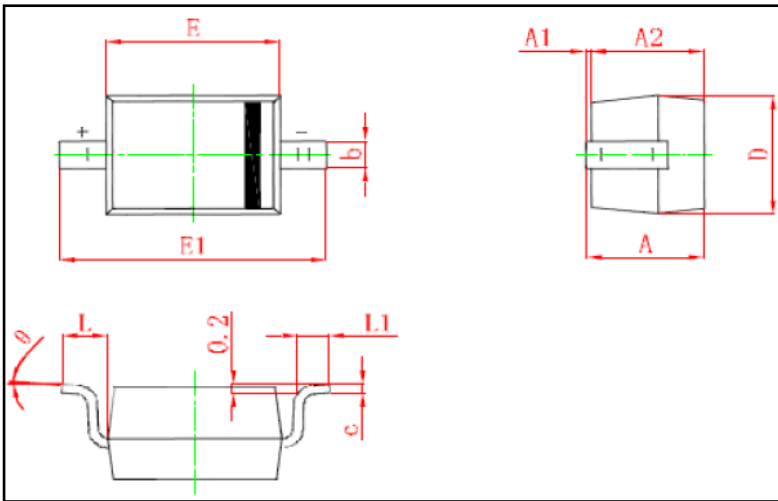
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B5817WS Thru B5819WS	F2	Approximate 0.004	3000	30000	120000	7" reel

■ Characteristics (Typical)



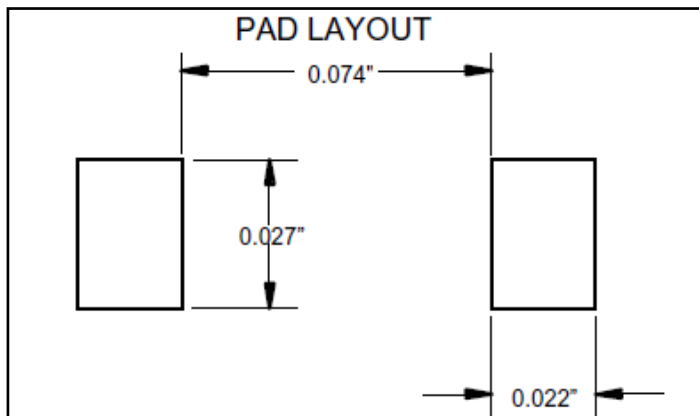


■ Outline Dimensions



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
θ	0°	8°

■ Soldering Footprint



Unit: inches