

B5817W-P2-HF Thru. B5819W-P2-HF

RoHS Device
Halogen Free



Features

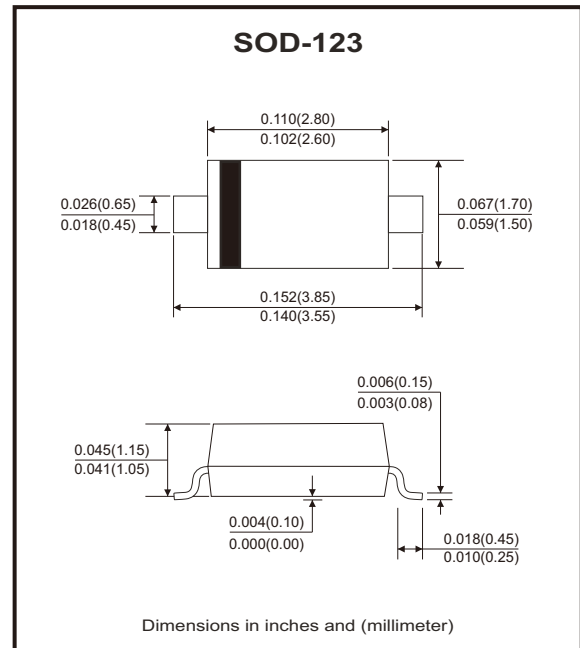
- Low forward voltage schottky rectifier.
- High frequency inverters.

Mechanical data

- Case: SOD-123, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram

Cathode  Anode



Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	B5817W-P2-HF	B5818W-P2-HF	B5819W-P2-HF	Unit
Non-repetitive peak reverse voltage	V_{RM}	20	30	40	V
Repetitive peak reverse voltage	V_{RRM}	20	30	40	
RMS reverse voltage	V_{RMS}	14	21	28	
Average rectified output current	I_O	1			A
Non-repetitive peak forward surge current @ 8.3ms single half sine-wave	I_{FSM}	10			A
Power dissipation	P_D	500			mW
Junction temperature	T_J	125			°C
Storage temperature range	T_{STG}	-55 to +125			°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V _F	I _F = 1A			0.45	V
					0.55	
					0.60	
	V _F	I _F = 3A			0.75	V
					0.875	
					0.90	
Reverse current	I _R	V _R = 20V			1	mA
		V _R = 30V			1	
		V _R = 40V			1	
Junction capacitance	C _J	V _R = 4V, f = 1MHz		120		pF

Typical Rating and Characteristic Curves (B5817W-P2-HF Thru. B5819W-P2-HF)

Fig.1 - Forward Current Derating Curve

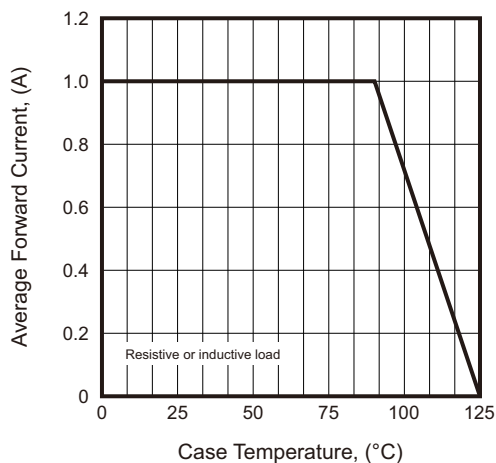
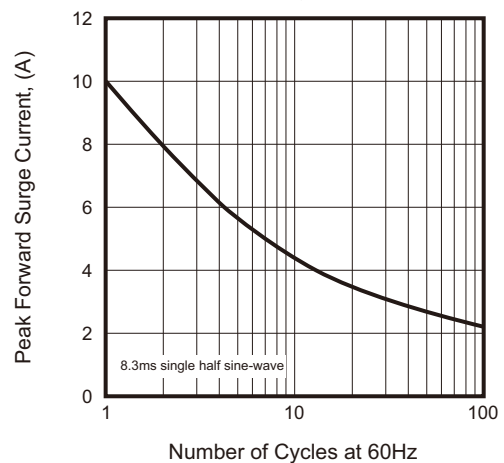


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current



Typical Rating and Characteristic Curves (B5817W-P2-HF Thru. B5819W-P2-HF)

Fig.3 - Typical Instantaneous Forward Characteristics

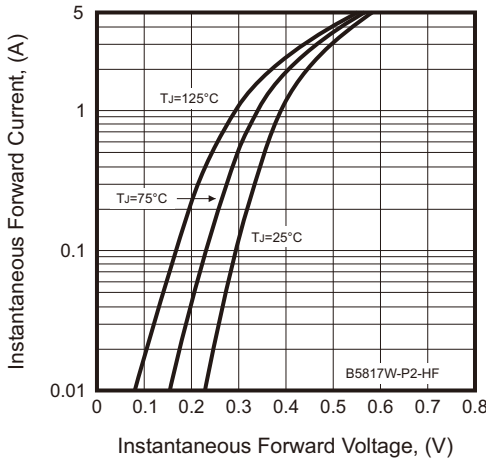


Fig.4 - Typical Instantaneous Forward Characteristics

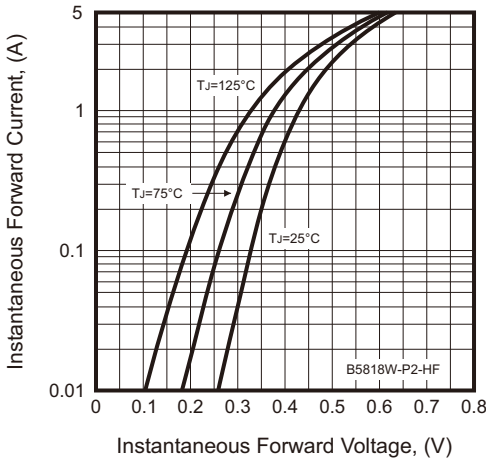


Fig.5 - Typical Instantaneous Forward Characteristics

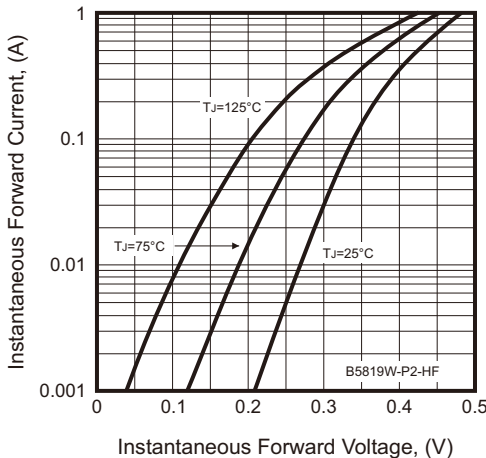


Fig.6 - Typical Reverse Leakage Characteristics

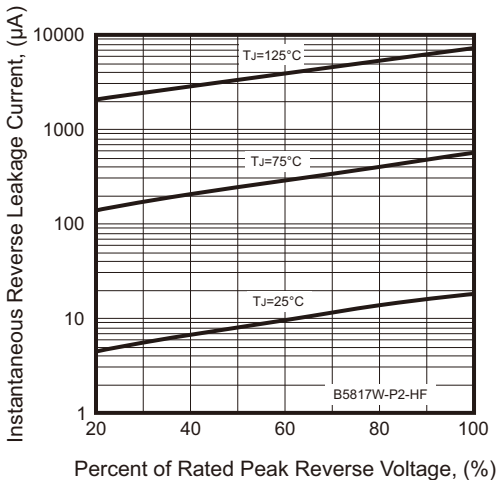


Fig.7 - Typical Reverse Leakage Characteristics

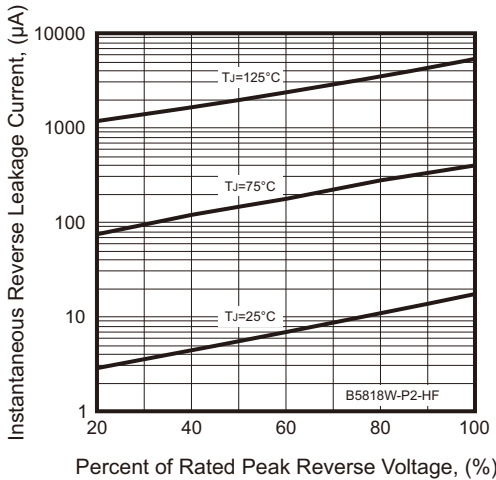
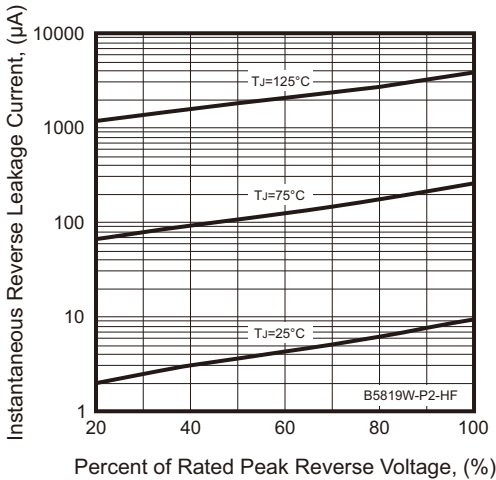
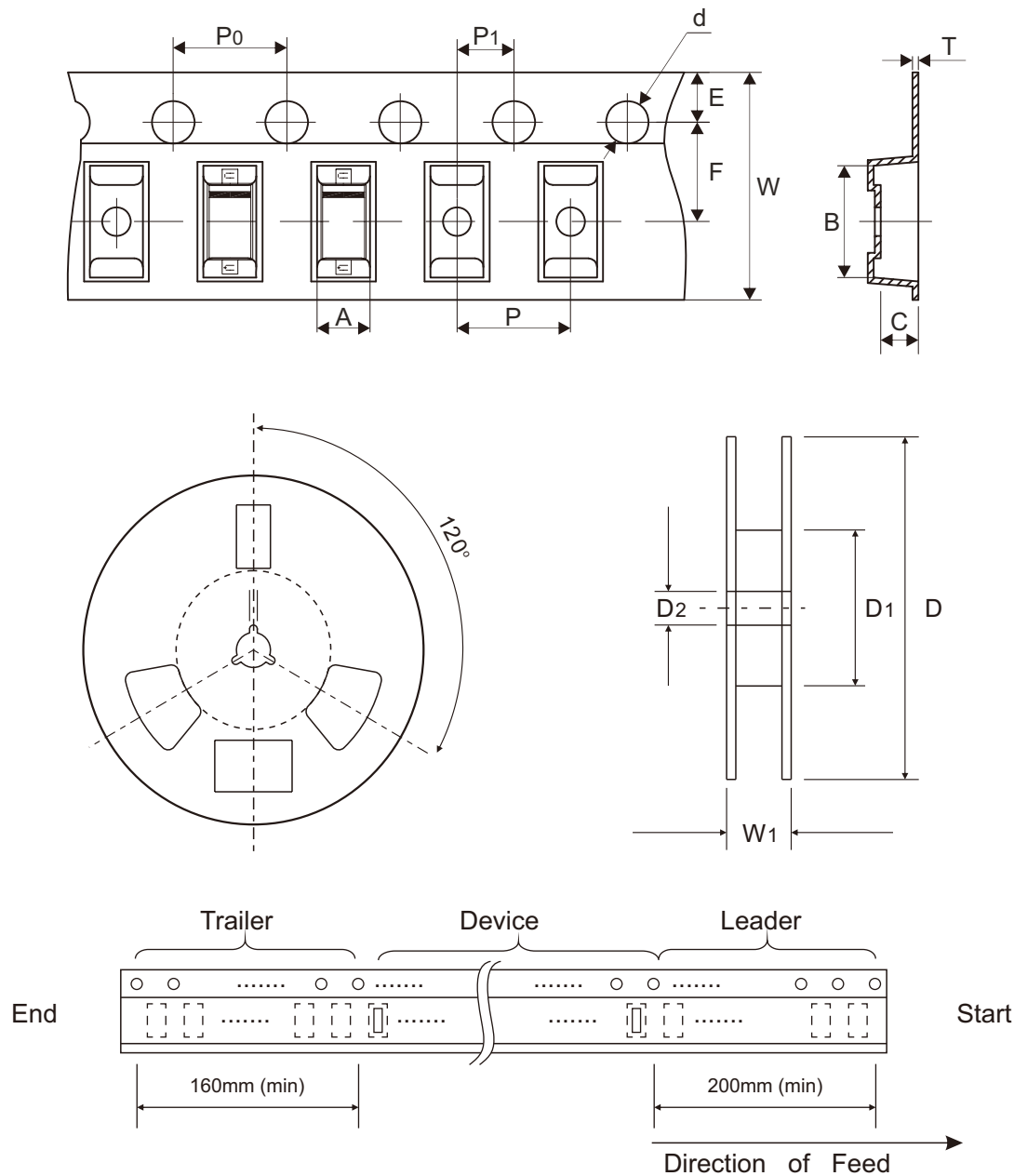


Fig.8 - Typical Reverse Leakage Characteristics



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.10	3.94 ± 0.10	1.57 ± 0.10	1.55 ± 0.05	178.00 ± 2.00	50.00 ± 0.50	13.00 ± 0.25
	(inch)	0.073 ± 0.004	0.155 ± 0.004	0.062 ± 0.004	0.061 ± 0.002	7.008 ± 0.079	1.969 ± 0.020	0.512 ± 0.010

SOD-123	SYMBOL	E	F	P	P1	P0	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.20 ± 0.02	8.00 + 0.30 - 0.10	11.50 ± 1.50
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.157 ± 0.004	0.008 ± 0.001	0.315 + 0.012 - 0.004	0.453 ± 0.059

Marking Code

Part Number	Marking Code	
B5817W-P2-HF	SJ	SJ.
B5818W-P2-HF	SK	
B5819W-P2-HF	SL	

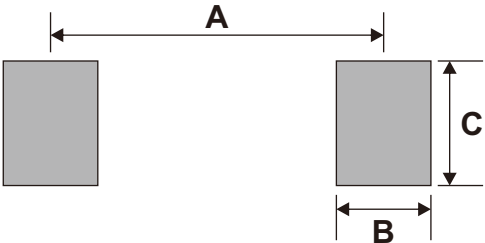


■ = Cathode band

XX./XX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	3.24	0.128
B	0.80	0.031
C	1.00	0.039



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-123	3,000	7