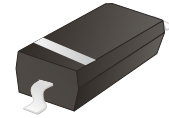


AUB5817W-HF Thru. AUB5819W-HF

RoHS Device
Halogen Free

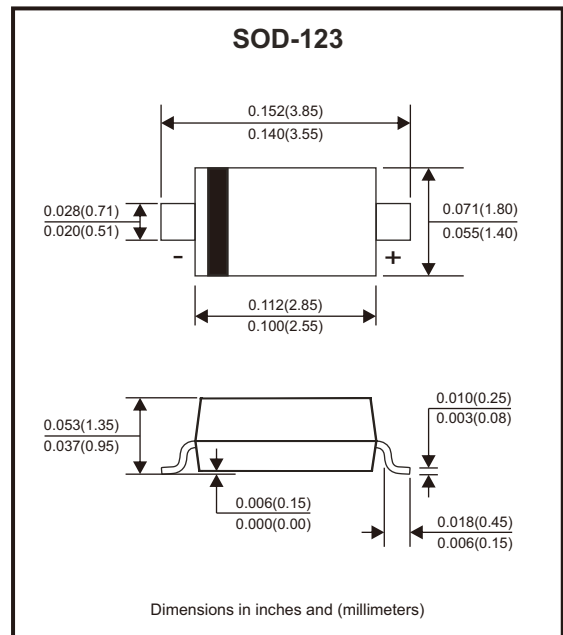


Features

- Use as rectifiers in low-voltage, high-frequency inverters.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOD-123, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.
- Polarity: Cathode line denotes the cathode end.



Circuit Diagram



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

Parameter	Symbol	AUB5817W-HF	AUB5818W-HF	AUB5819W-HF	Unit
Reverse voltage	V_R	20	30	40	V
Average forward current	$I_{F(AV)}$	1			A
Peak forward surge current @8.3ms, half sine	I_{FSM}	10			A
Voltage rate of change (Rate V_R)	dV/dt	1000			V/ μ s
Power dissipation	P_D	450			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	222			°C/W
Junction temperature range	T_J	-55 to +125			°C
Storage temperature range	T_{STG}	-55 to +150			°C

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _{BR}	I _R = 1mA	20			V
			30			
			40			
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 leakage current	I _R	V _R = 20V			200	μA
		V _R = 30V			40	
		V _R = 40V			40	
Junction capacitance	C _J	V _R = 4V, f = 1MHz			120	pF

Typical Rating and Characteristic Curves (AUB5817W-HF Thru. AUB5819W-HF)

Fig.1 - Forward Characteristics

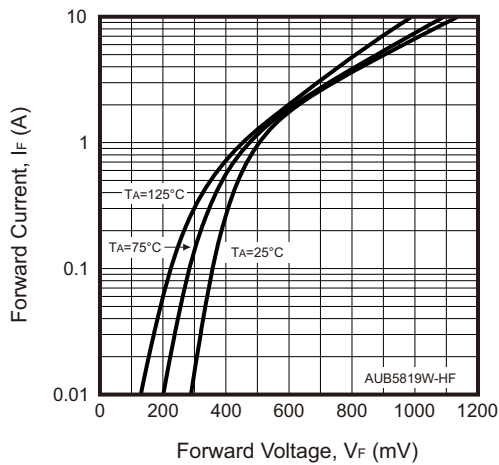


Fig.2 - Reverse Characteristics

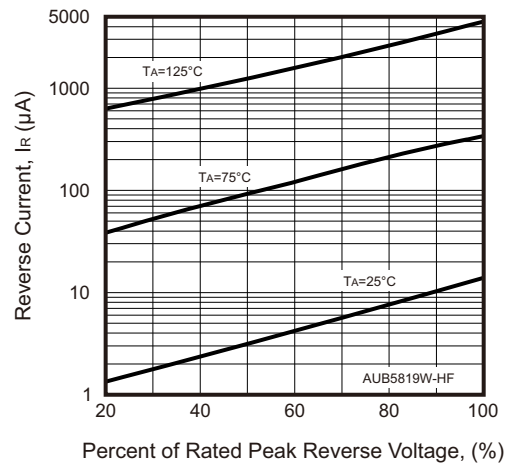
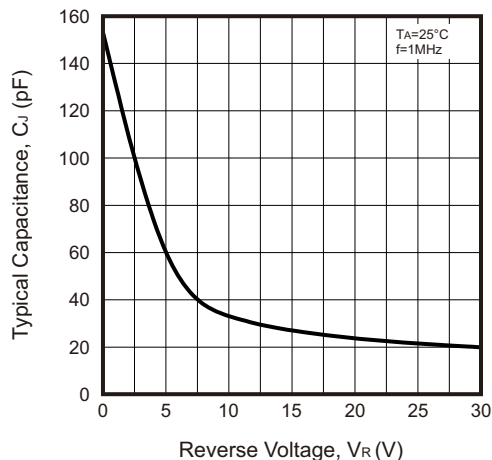
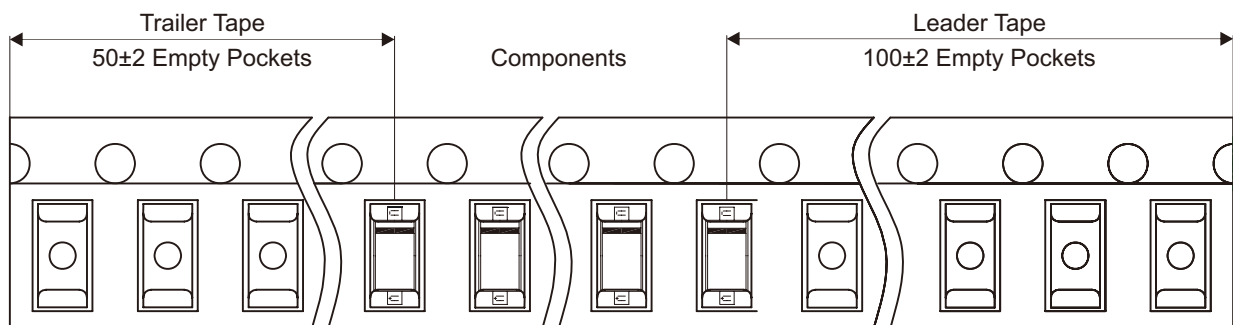
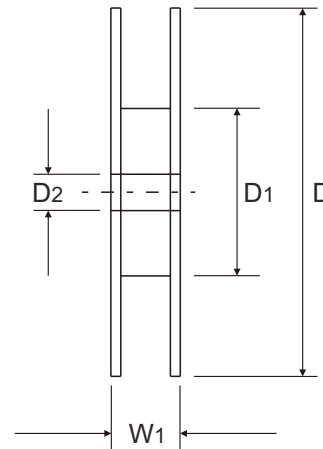
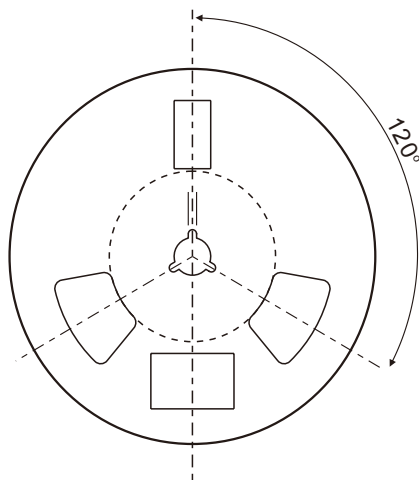
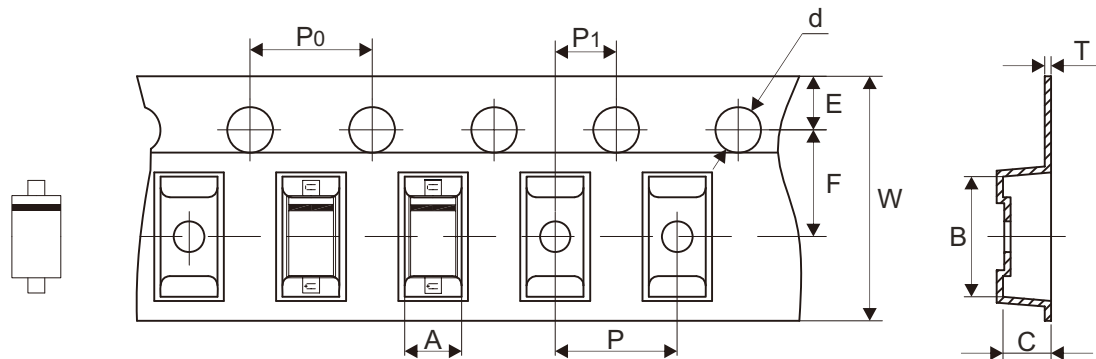


Fig.3 - Capacitance Characteristics



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.75 ± 0.10	3.94 ± 0.10	1.52 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.069 ± 0.004	0.155 ± 0.004	0.060 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-123	SYMBOL	E	F	P	P1	P0	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.20 ± 0.02	8.00 + 0.20 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.157 ± 0.004	0.008 ± 0.001	0.315 + 0.008 - 0.004	0.484 ± 0.039

Marking Code

Part Number	Marking Code
AUB5817W-HF	SJ.
AUB5818W-HF	SK.
AUB5819W-HF	SL.

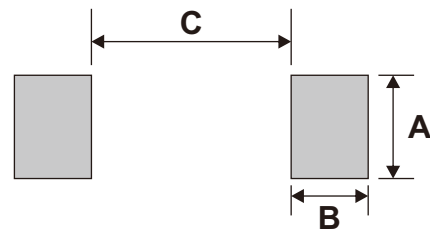


XX = Product type marking code

█ = Cathode band

Suggested P.C.B. PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	1.22	0.048
B	0.91	0.036
C	2.36	0.093



Standard Packaging

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