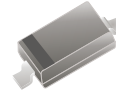


AUB5817WS-HF Thru. AUB5819WS-HF

RoHS Device
Halogen Free

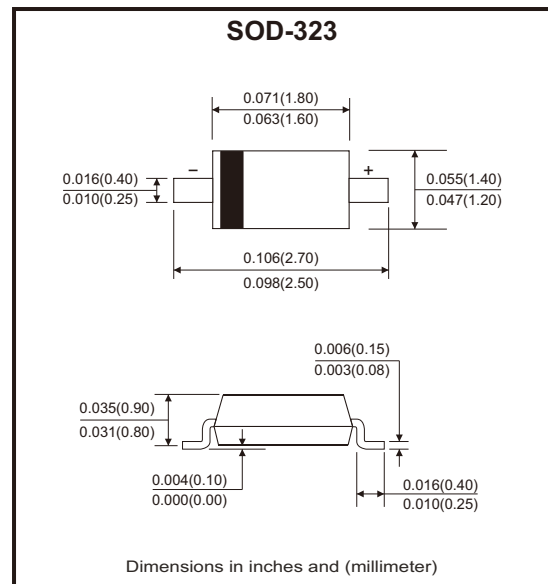


Features

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

Mechanical data

- Case: SOD-323, 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	AUB5817WS-HF	AUB5818WS-HF	AUB5819WS-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
Power dissipation	P_D	250			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	400			°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}	$I_R = 1\text{mA}$	20			V
			30			
			40			
Forward voltage	V_F	$I_F = 1\text{A}$			0.45	V
					0.55	
					0.60	
	V_F	$I_F = 3\text{A}$			0.75	V
					0.875	
					0.90	
Reverse leakage current	I_R	$V_R = 20\text{V}$			200	μA
		$V_R = 30\text{V}$			40	
		$V_R = 40\text{V}$			40	
Junction capacitance	C_J	$V_R = 4\text{V}, f = 1\text{MHz}$			120	pF

Typical Rating and Characteristic Curves (AUB5817WS-HF Thru. AUB5819WS-HF)

Fig.1 - Forward Characteristics

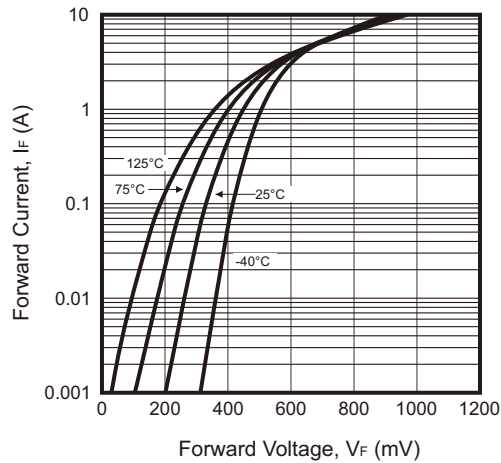


Fig.2 - Reverse Characteristics

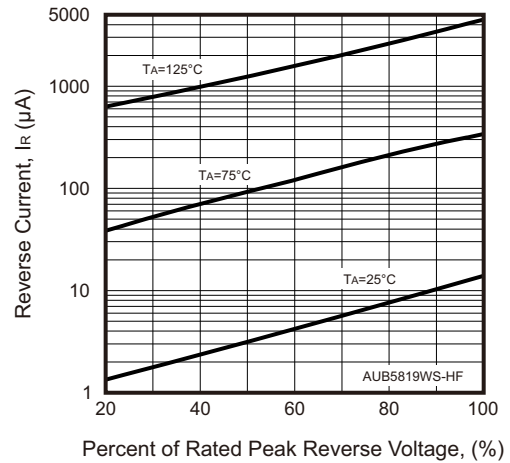
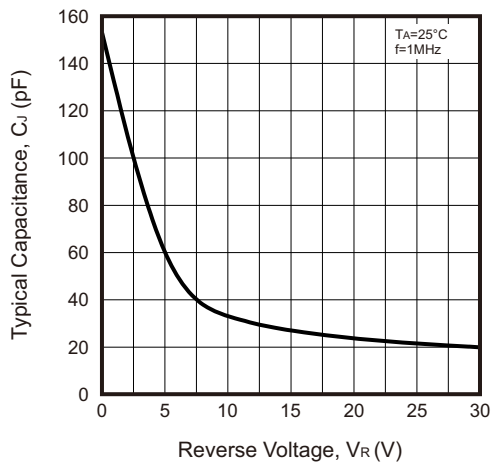
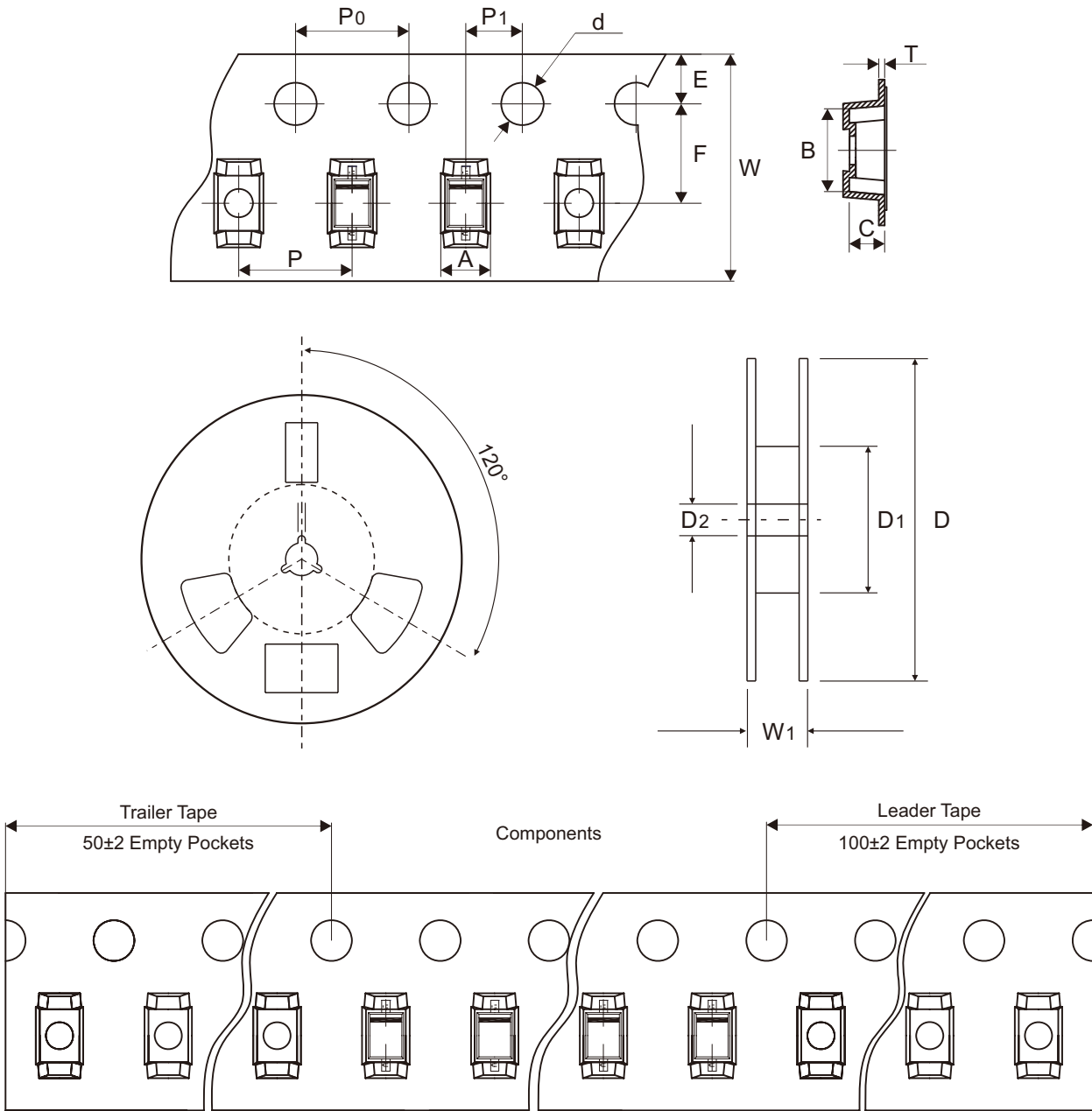


Fig.3 - Capacitance Characteristics



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.50 ± 0.05	2.90 ± 0.10	1.25 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.059 ± 0.002	0.114 ± 0.004	0.049 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-323	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.254 ± 0.02	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.001	0.315 + 0.012 - 0.004	0.484 ± 0.039

Marking Code

Part Number	Marking Code
AUB5817WS-HF	SJ.
AUB5818WS-HF	SK.
AUB5819WS-HF	SL.

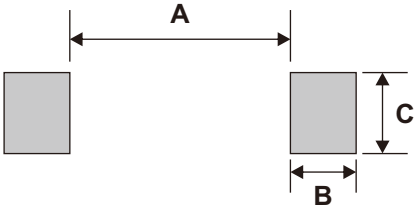


■ = Cathode band

XX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	1.88	0.074
B	0.56	0.022
C	0.69	0.027



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7