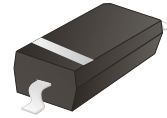


ASD101xW-HF Series

RoHS Device
Halogen Free



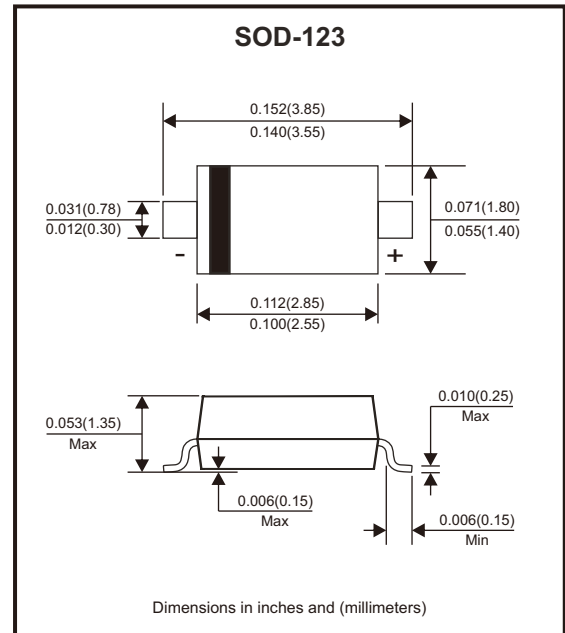
Features

- Epoxy meets UL-94 V-0 flammability rating.
- For surface mount application.
- 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	ASD101AW-HF	ASD101BW-HF	ASD101CW-HF	Unit
Peak repetitive reverse voltage	V_{RRM}	60	50	40	V
Average forward current	I_{FAV}	0.07			A
Peak forward surge current (8.3ms, half sine)	I_{FSM}	0.7			A
Power dissipation	P_D	400			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	250			°C/W
Maximum junction temperature	T_J	125			°C
Storage temperature range	T_{STG}	-55 to +150			°C

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

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage ASD101AW-HF ASD101BW-HF ASD101CW-HF	$V_{(BR)R}$	$I_R = 10\mu A$	60 50 40		V
Forward voltage ASD101AW-HF ASD101BW-HF ASD101CW-HF	V_F	$I_F = 1mA$		0.41 0.40 0.39	V
Forward voltage	V_F	$I_F = 15mA$		1.0	V
Reverse leakage current ASD101AW-HF ASD101BW-HF ASD101CW-HF	I_R	$V_R = 50V$ $V_R = 40V$ $V_R = 30V$		0.2	μA
Junction capacitance	C_J	$V_R = 1V, f = 1MHz$		4	pF

Typical Rating and Characteristic Curves (ASD101AW-HF Thru. ASD101CW-HF)

Fig.1 - Forward Characteristics

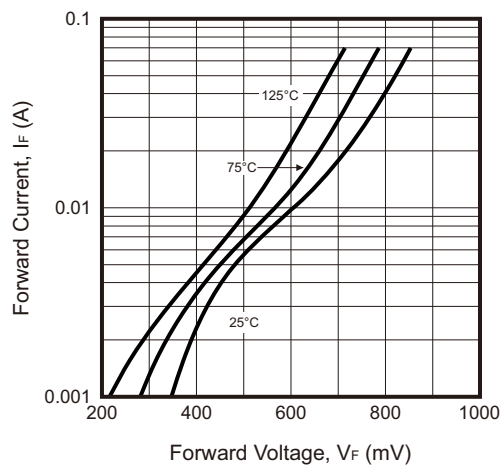


Fig.2 - Reverse Characteristics

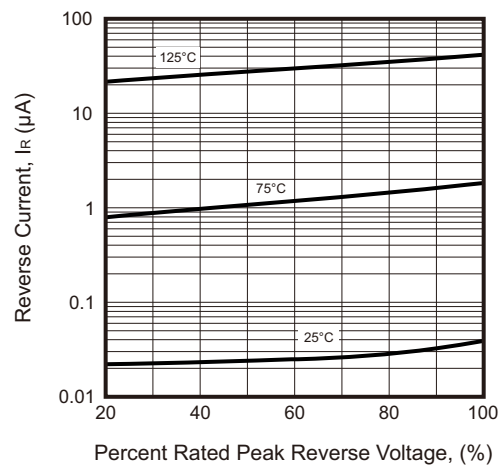
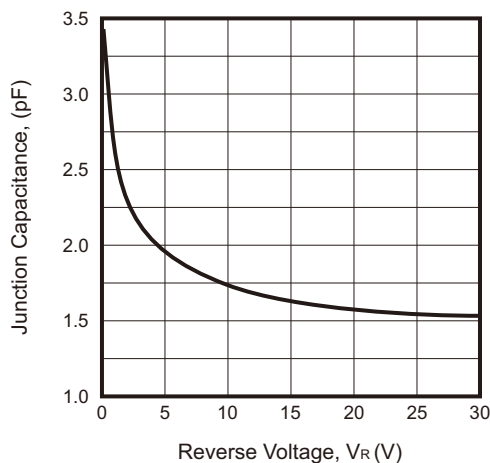
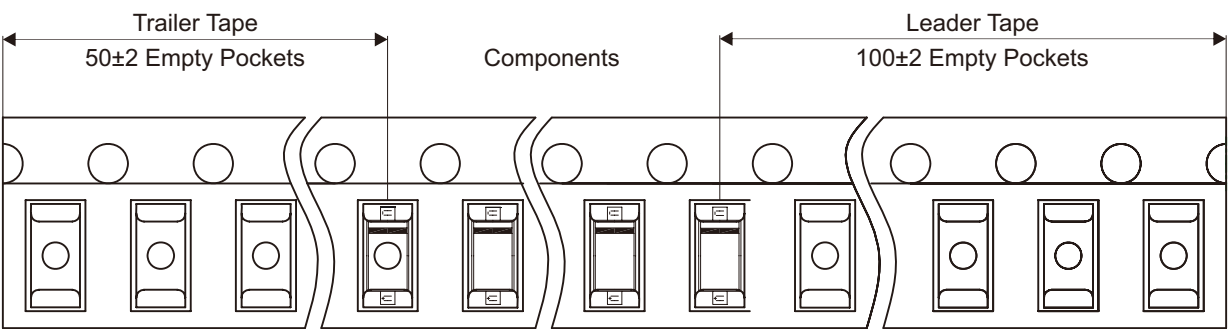
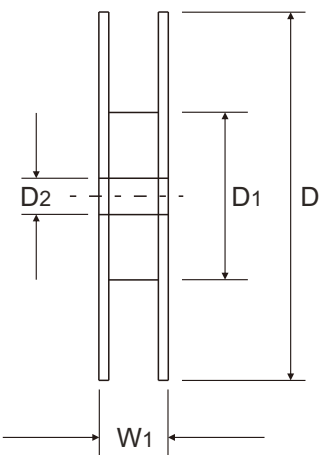
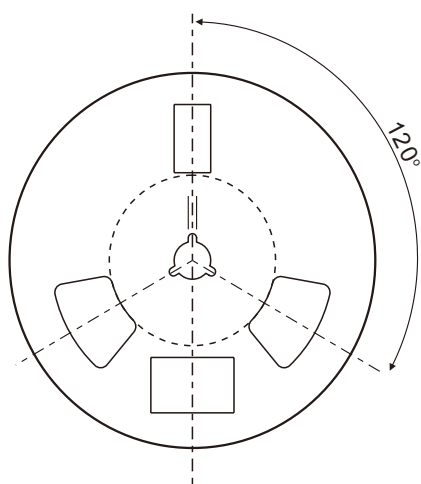
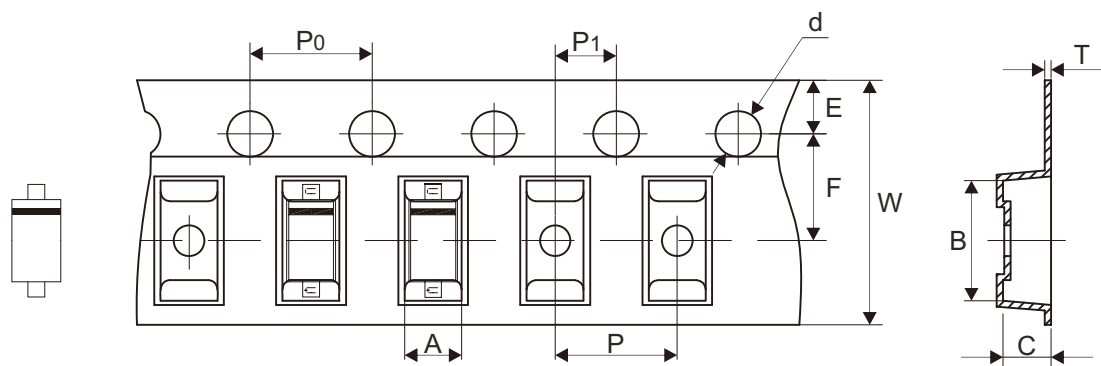


Fig.3 - Junction Capacitance



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
ASD101AW-HF	S1.
ASD101BW-HF	S2.
ASD101CW-HF	S3.

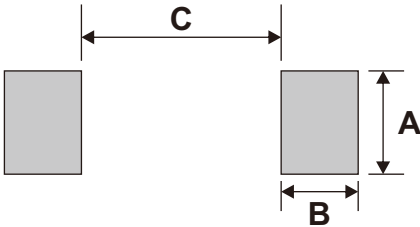


XX = Product type marking code

█ = 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