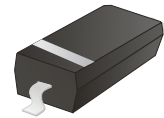


ACDSW21-HF

RoHS Device
Halogen Free



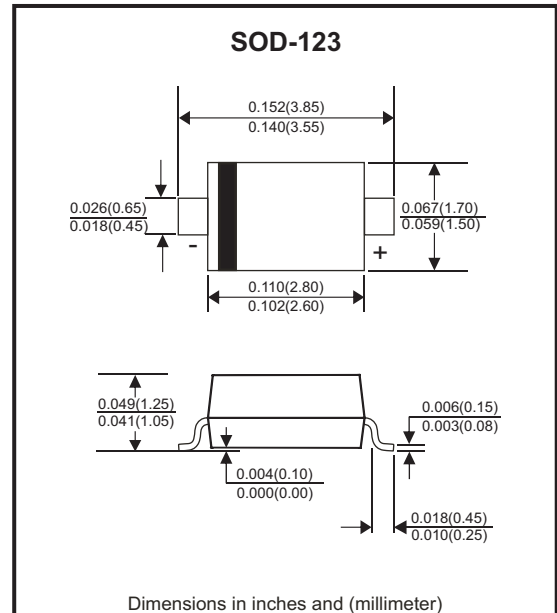
Features

- Fast switching speed.
- Low reverse current.
- Surface mount package ideally suited for automatic insertion.
- For general purpose switching applications.
- Comply with AEC-Q101.

Mechanical data

- Case: SOD-123, molded plastic.
- Weight: 0.01 gram(approx.).

Circuit diagram



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

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	V_{RM}	250	V
Peak repetitive reverse voltage	V_{RRM}	200	V
Working peak reverse voltage	V_{RWM}		
RMS reverse voltage	$V_{R(RMS)}$	141	V
Average rectified output current	I_o	200	mA
Non-repetitive peak forward surge current @ t=8.3ms	I_{FSM}	2.0	A
Power dissipation	P_D	500	mW
Thermal Resistance (Junction to ambient)	$R_{\theta JA}$	250	°C/W
Junction temperature	T_J	150	°C
Storage temperature	T_{STG}	-55 ~ +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=100mA$ $I_F=200mA$	V_F			1.0 1.25	V
Reverse current	$V_R=200V$	I_R			0.1	μA
Total capacitance	$V_R=0V$, f=1MHz	C_{tot}			5	pF
Reverse recovery time	$I_F=I_R=30mA$, $I_{rr}=0.1 \cdot I_R$, $R_L=100\Omega$	t_{RR}			50	ns

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

RATING AND TYPICAL CHARACTERISTIC CURVES (ACDSW21-HF)

Fig.1 - Forward Characteristic

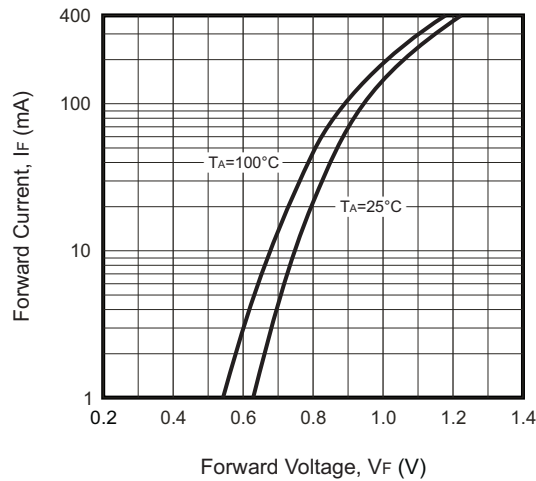


Fig.2 - Reverse Characteristic

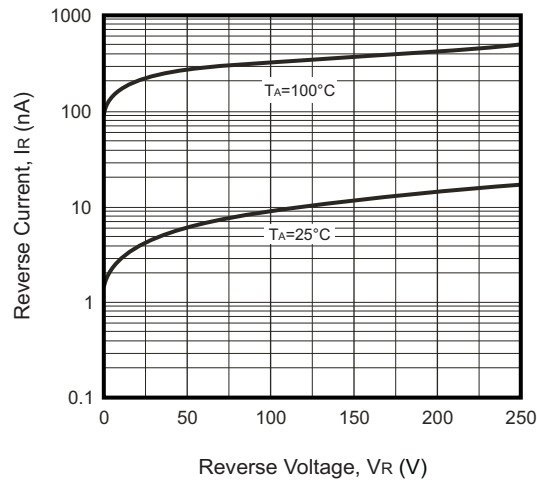


Fig.3 - Capacitance Characteristics

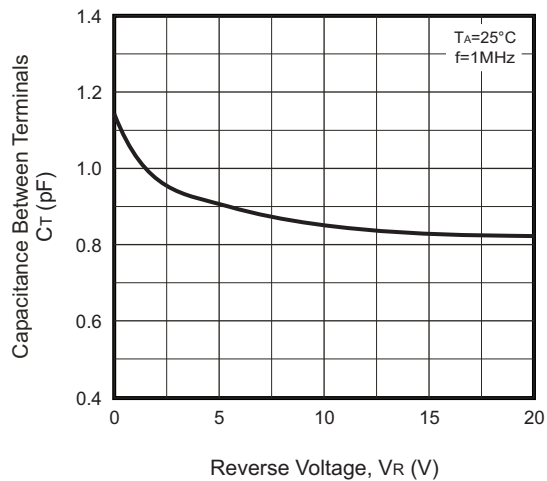
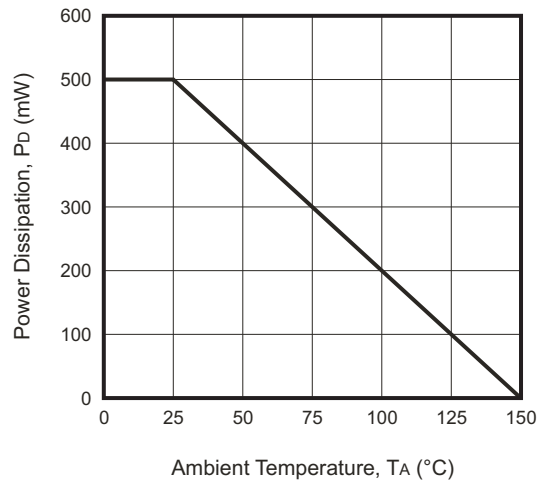
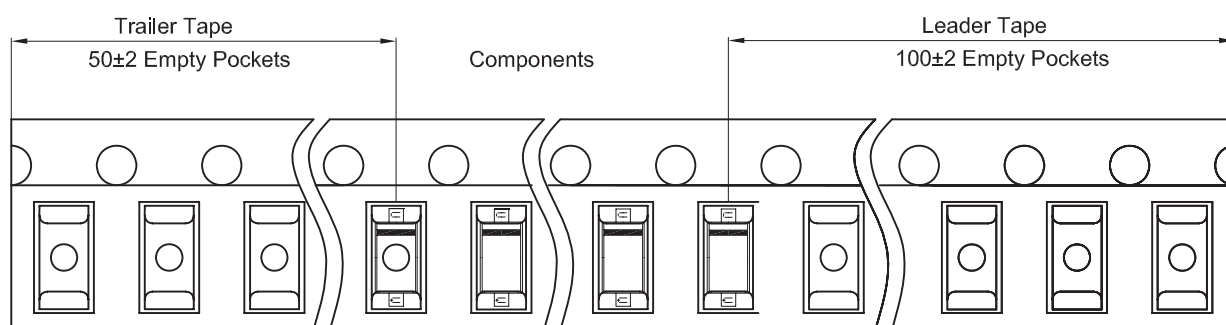
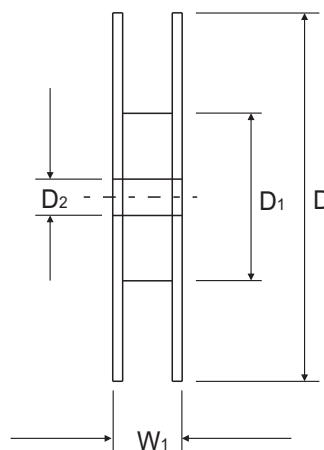
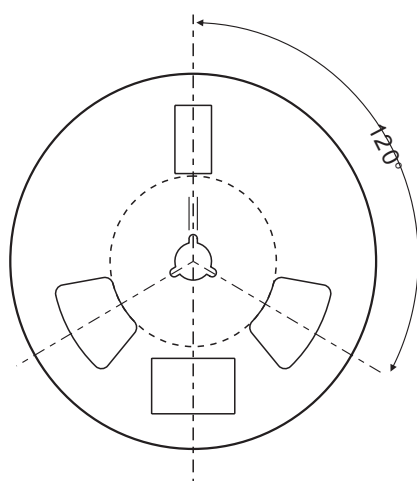
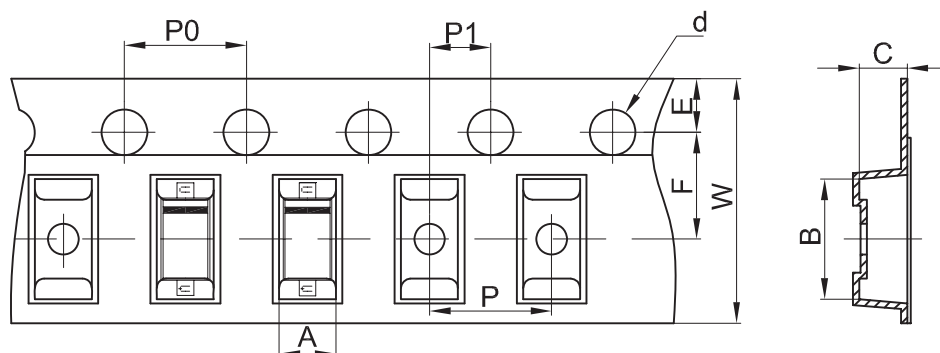


Fig.4 - Power Derating Curve



Reel Taping Specification



SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.10	3.95 ± 0.10	1.57 ± 0.10	1.55 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.0 ± 0.20
	(inch)	0.073 ± 0.004	0.155 ± 0.004	0.062 ± 0.004	0.061 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOD-123	SYMBOL	E	F	P	P1	P0	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	8.00 ± 1.00	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.079 ± 0.004	0.158 ± 0.004	0.315 ± 0.039	0.484 ± 0.039

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

Marking Code

Part Number	Marking Code
ACDSW21-HF	T3

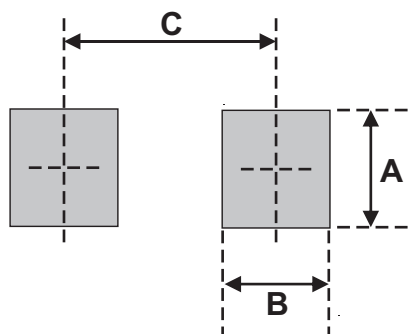


The marking bar indicates the cathode

Solid dot “ • ” = Halogen Free

Suggested PAD Layout

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



Note:

1.The pad layout is for reference purposes only.

Standard Packaging

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