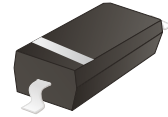


CDSW16-G

RoHS Device

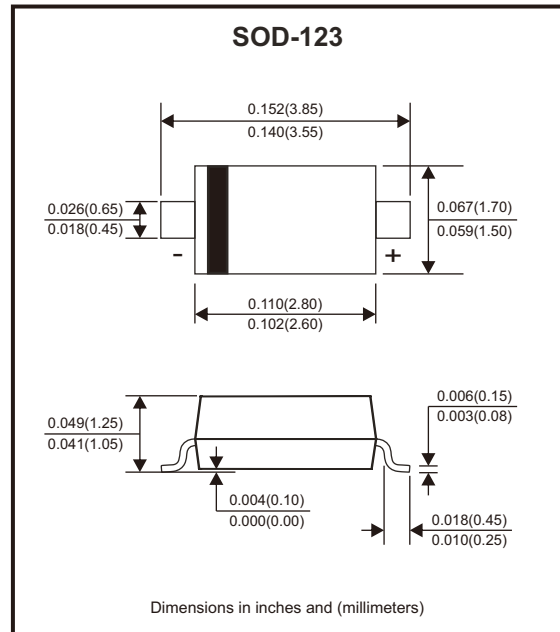


Features

- Fast switching speed.
- Electrically identical to standard JEDEC.
- High conductance.
- Surface mount package ideally suited for automatic insertion.
- Flat package SOD-123 in stead mini-MELF package.

Mechanical data

- Case: SOD-123, Molded Plastic
- Terminals: Soderable per MIL-STD-202, method 208.
- Weight: 0.01 grams (approx.).



Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Non-repetitive peak reverse voltage		V_{RM}	100	V
Peak repetitive peak reverse voltage		V_{RRM}	100	V
Working peak reverse voltage		V_{RWM}		
DC blocking voltage		V_R		
RMS reverse voltage		$V_{R(RMS)}$	71	V
Forward continuous current		I_{FM}	300	mA
Average rectified output current		I_o	150	mA
Peak forward surge current	$T_P = 1\mu S$ $T_P = 1S$	I_{FSM}	2 1	A
Power dissipation		P_D	400	mW
Thermal resistance from junction to ambient		$R_{\theta JA}$	250	°C/W
Junction temperature		T_j	150	°C
Storage temperature range		T_{STG}	-55 ~ +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF=1mA IF=10mA IF=50mA IF=150mA	VF			0.715 0.855 1.0 1.25	V
Reverse current	VR=20V VR=75V	IR			25 1	nA μA
Capacitance between terminals	f=1MHz, and 0VDC reverse voltage	CT			2	pF
Reverse recovery time	IF=IR=10mA, RL=100Ω, Irr=0.1xIR	TRR			4	nS

Rating and Characteristic Curves (CDSW16-G)

Fig.1 - Forward Characteristics

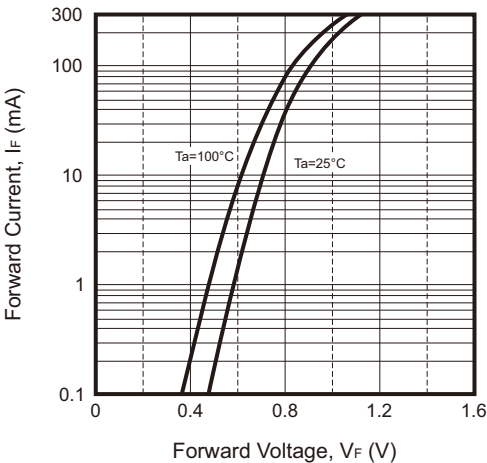


Fig.2 - Reverse Characteristics

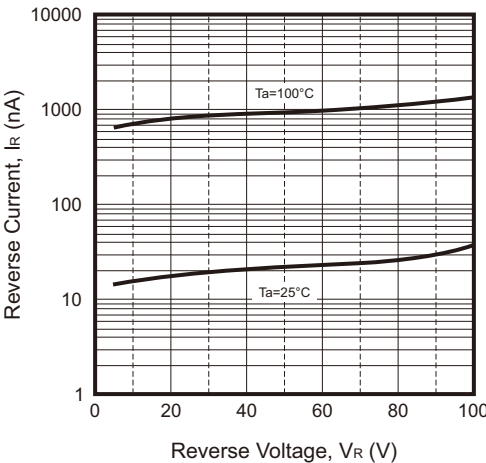


Fig.3 - Capacitance Characteristics

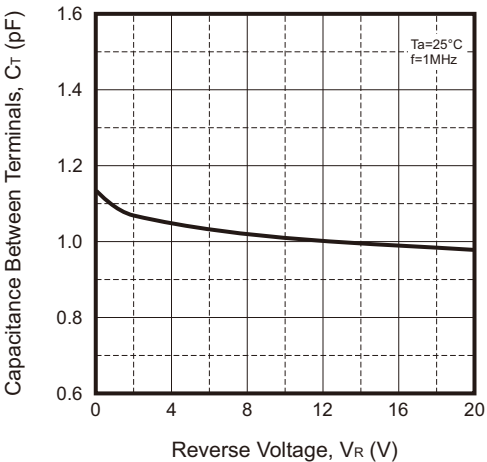
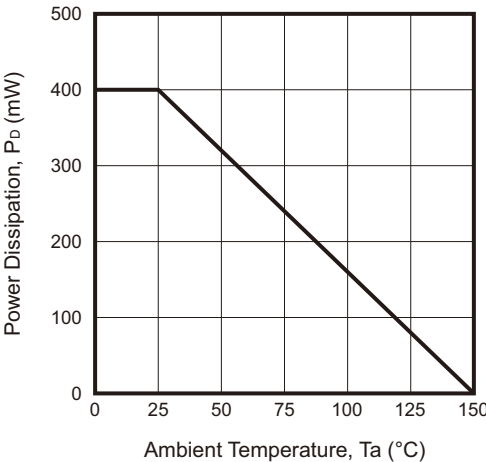
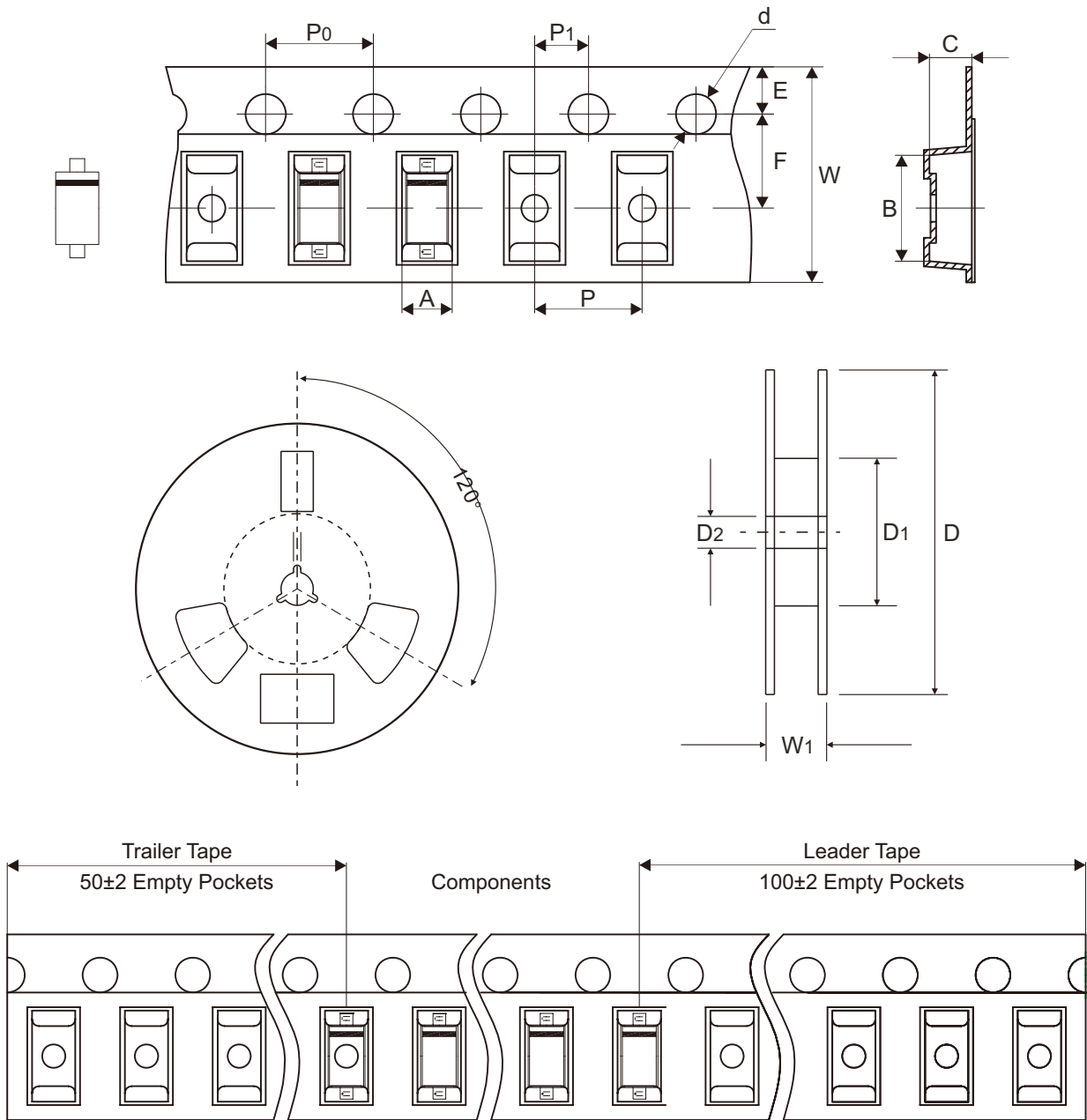


Fig.4 - Power Derating Curve



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	178.00 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.073 ± 0.004	0.156 ± 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	0.157 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.315 ± 0.039	0.484 ± 0.039

Marking Code

Part Number	Marking Code
CDSW16-G	T6

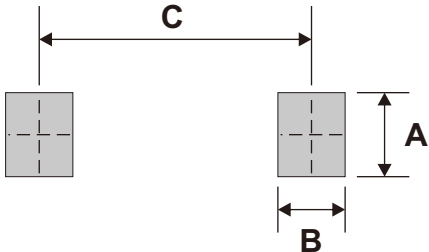


XX = Product type marking code

 = Cathode band

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