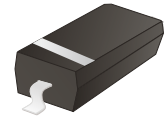


CDSW19-G/20-G/21-G

RoHS Device



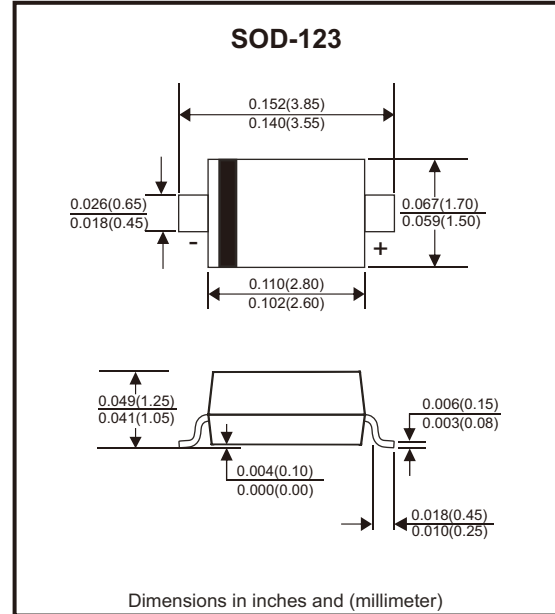
Features

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

Mechanical data

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

Circuit Diagram



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

Parameter	Symbol	CDSW19-G	CDSW20-G	CDSW21-G	Unit
Non-repetitive peak reverse voltage	V_{RM}	120	200	250	V
Peak repetitive reverse voltage	V_{RRM}	100	150	200	V
Working peak reverse voltage	V_{RWM}				V
RMS reverse voltage	$V_{R(RMS)}$	71	106	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	CDSW19-G $V_R=100V$ CDSW20-G $V_R=150V$ CDSW21-G $V_R=200V$	I_R			0.1 0.1 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:E

Rating and Typical Characteristic Curves (CDSW19-G/20-G/21-G)

Fig.1 - Forward Characteristic

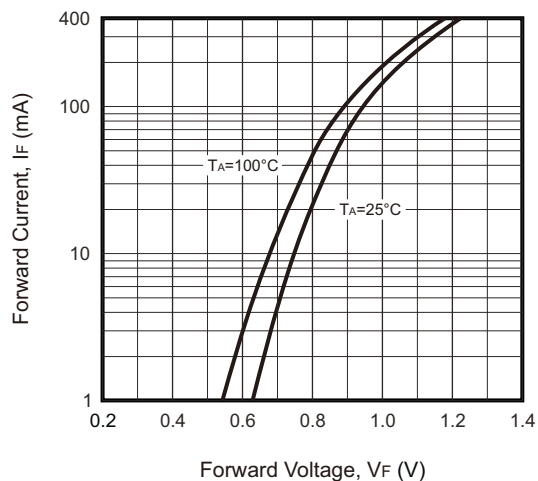


Fig.2 - Reverse Characteristic

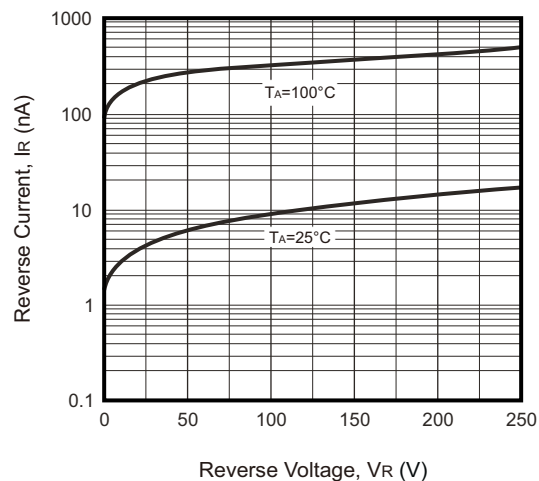


Fig.3 - Capacitance Characteristics

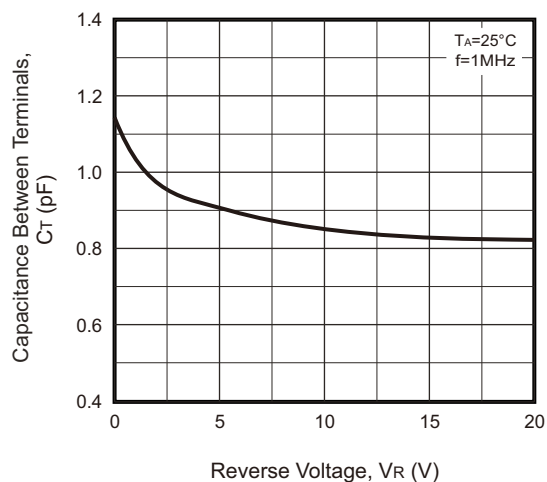
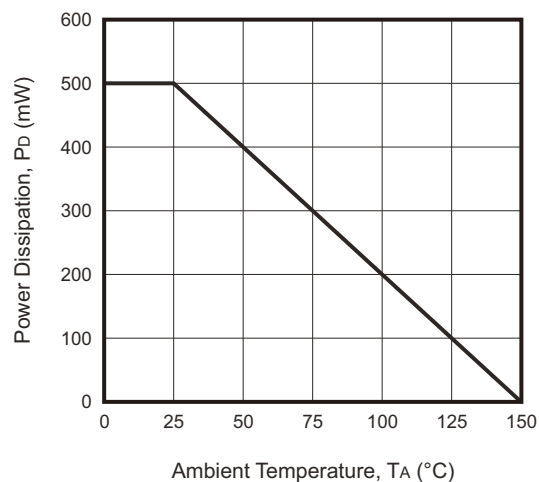
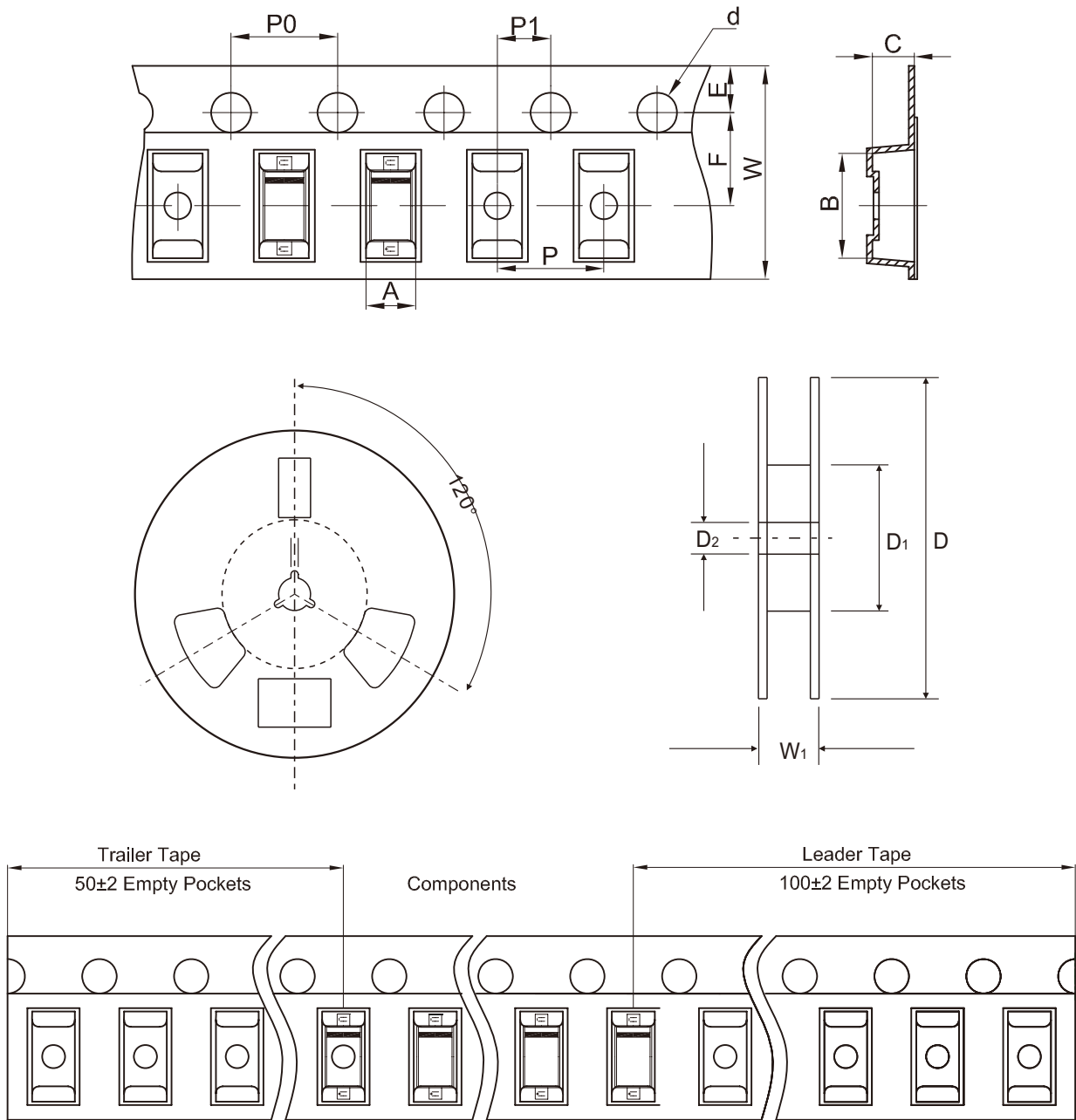


Fig.4 - Power Derating Curve



Reel Taping Specification

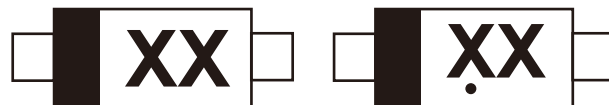


SOD-123	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.85 ± 0.10	3.95 ± 0.10	1.57 ± 0.10	1.55 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.0 ± 0.20
	(inch)	0.073 ± 0.004	0.155 ± 0.004	0.062 ± 0.004	0.061 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

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

Marking Code

Part Number	Marking Code
CDSW19-G	A8
CDSW20-G	T2
CDSW21-G	T3



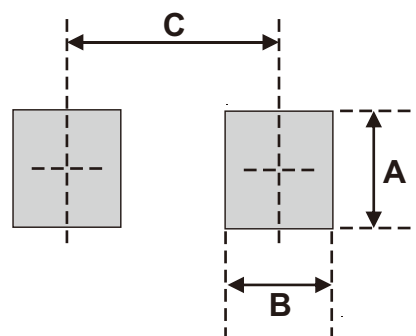
■ = Cathode band

Solid dot = Control code

xx = Product type marking code

Suggested P.C.B. 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