CDSW4148-G

High Speed
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

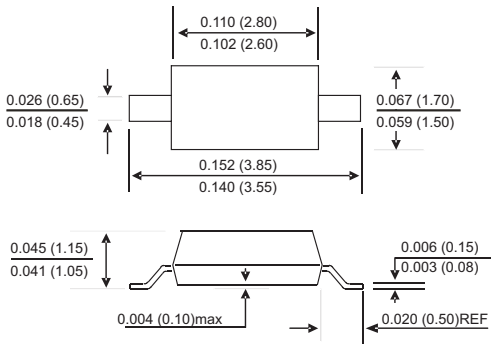
Mechanical data

-Case: SOD-123, Molded Plastic

-Terminals: Solderable per MIL-STD-202, Method 208

-Weight: 0.0097 gram(approx.).

SOD-123



Dimensions in inches and (millimeters)

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

Parameter	Conditions	Symbol	Min	Max	Unit
Non-Repetitive peak reverse voltage		V_{RM}		100	V
Peak repetitive peak reverse voltage **Working peak reverse voltage** **DC blocking voltage**		V_{RRM} V_{RWM} V_R		75	V
RMS reverse voltage		$V_{R(RMS)}$		53	V
Forward continuous current		I_{FM}		300	mA
Average rectified output current		Io		150	mA
Peak forward surge current	T_P = 1uS T_P = 1S	I_{FSM}		2 1	A
Power dissipation		P_D		400	mW
Thermal Resistance (Junction to ambient)		$R_{\theta JA}$		315	°C/W
Storage temperature		T_{STG}	-65	+150	°C
Junction temperature		T_j	-65	+150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 1 mA DC I_F = 10mA DC I_F = 50mA DC I_F =150mA DC	V_F			0.715 0.855 1.0 1.25	V
Reverse current	V_R = 20 V V_R = 75 V	I_R			25 1	nA μA
Capacitance between terminals	f = 1 MHz and V_R=0V DC	C_J			2	pF
Reverse recovery time	I_F = I_R = 10 mA, R_L =100 ohms, Irr = 0.1 X I_R	T_{RR}			4	nS

Typical Characteristics (CDSW4148-G)

Fig.1 - Forward Characteristics

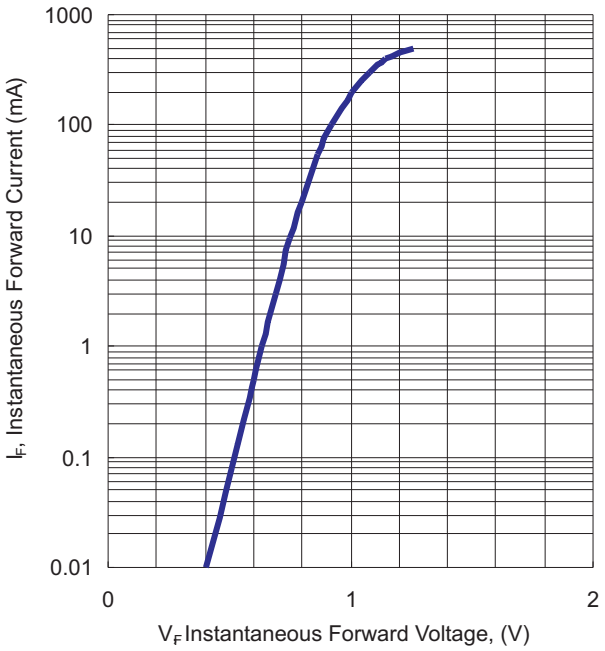
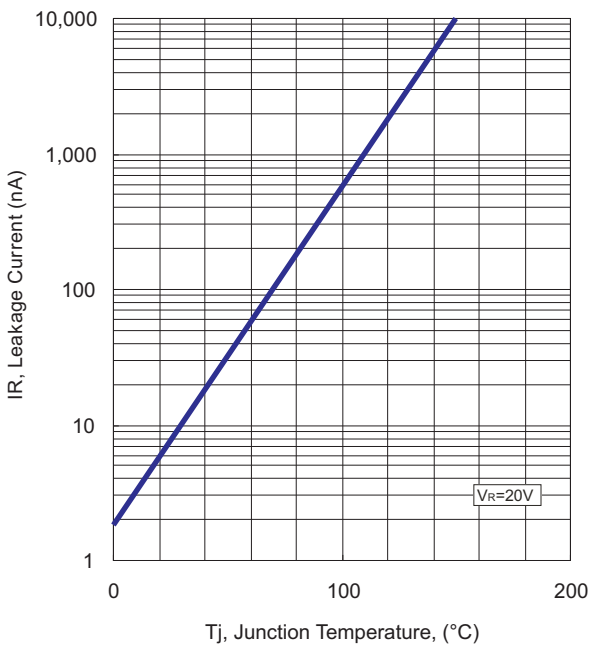
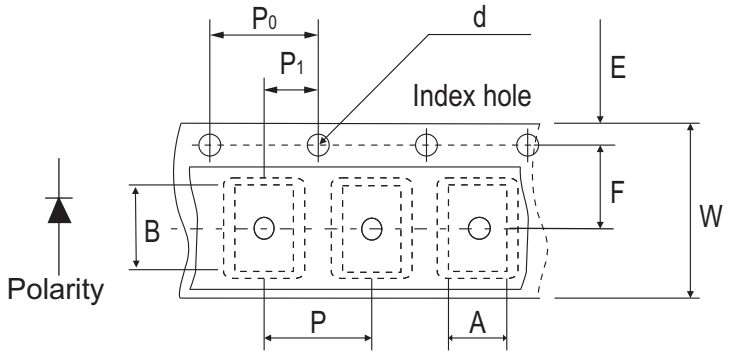
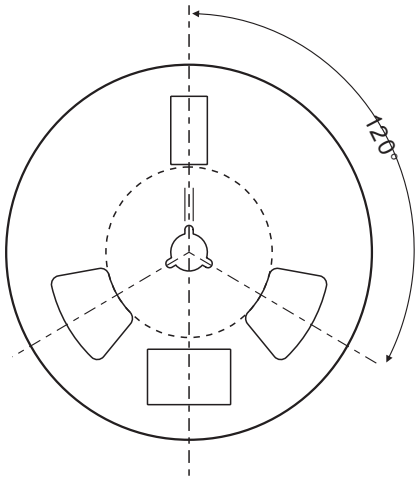


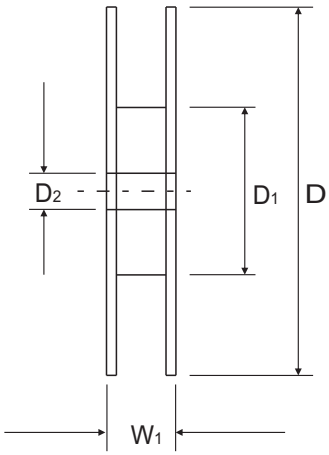
Fig.2 - Leakage current V.S. Junction Temperature

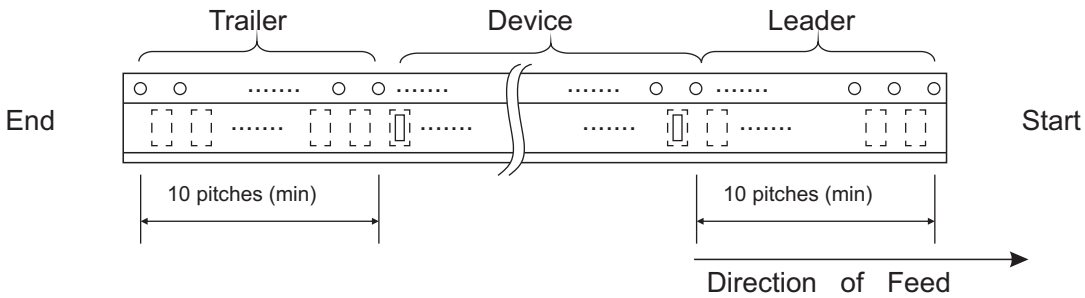


Reel Taping Specification









	SYMBOL	A	B	C	d	D	D1	D2
SOD-123	(mm)	1.85 ± 0.10	3.94 ± 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

	SYMBOL	E	F	P	P0	P1	W	W1
SOD-123	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.374 ± 0.039

Marking Code

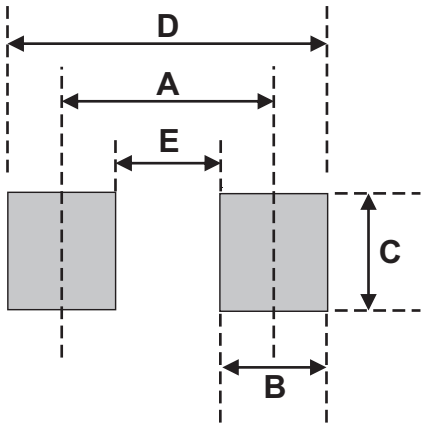
Part Number	Marking Code
CDSW4148-G	T4



xx = Product type marking code

Suggested PAD Layout

SIZE	SOD-123	
	(mm)	(inch)
A	3.35	0.132
B	0.80	0.032
C	1.00	0.039
D	4.15	0.163
E	2.55	0.100



Standard Packaging

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