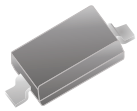
SMD Switching Diode

CDSV4148-G

RoHS Device



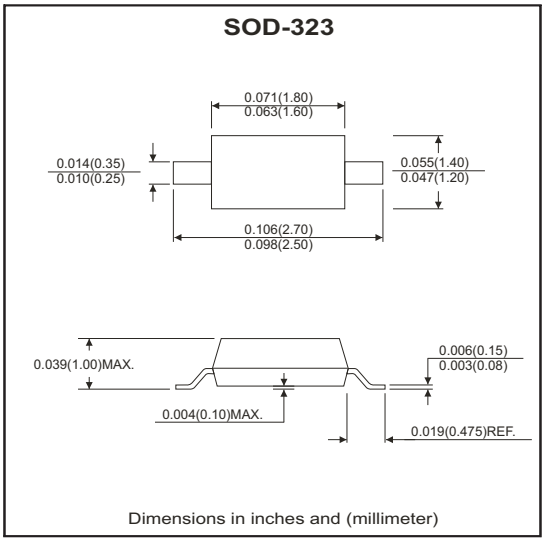
Features

-Fast Switching Speed

-High Conductance

-Surface Mount Package Ideally Suited for Automatic Insertion

-For General Purpose Switching Appilcations.



Mechanical data

-Case: SOD-323, Molded Plastic

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

-Mounting position: Any.

Maximum Ratings (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	mA
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		200	mW
Thermal Resistance (Junction to ambient)		$R_{\theta JA}$		625	°C/W
Storage temperature		T_{STG}	-65	+150	°C
Junction temperature		T_j		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 1mA 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 uA
Capacitance between terminals	f = 1 MHz,and 0VDC reverse voltage	C_T			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

PATING AND CHARACTERISTIC CURVES (CDSV4148-G)

Fig.1 - Forward Characteristics

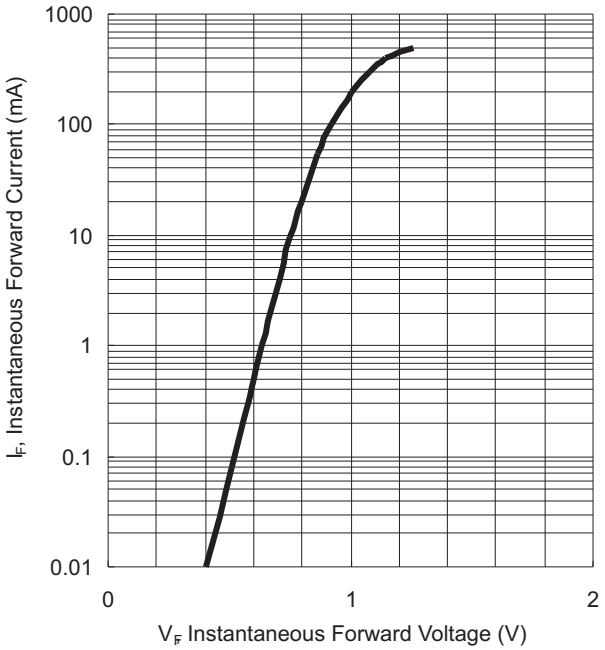
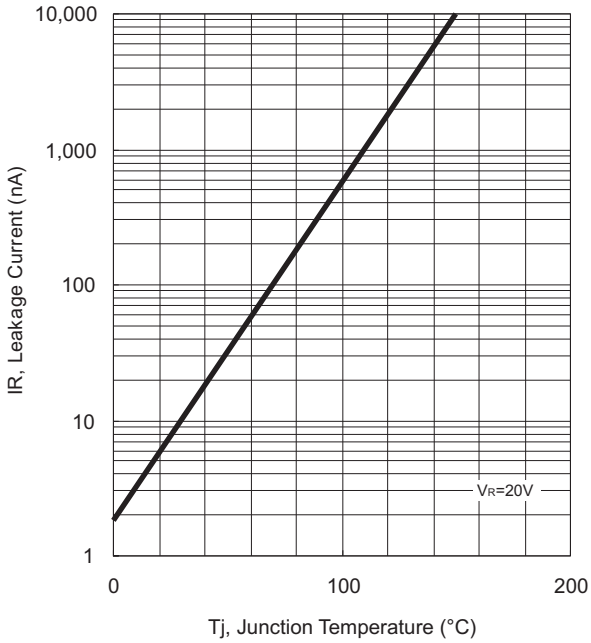
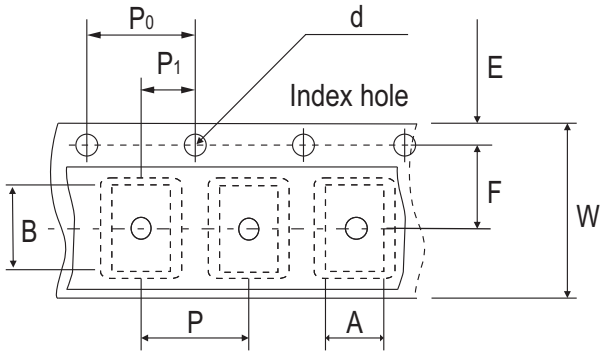
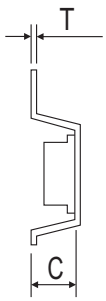


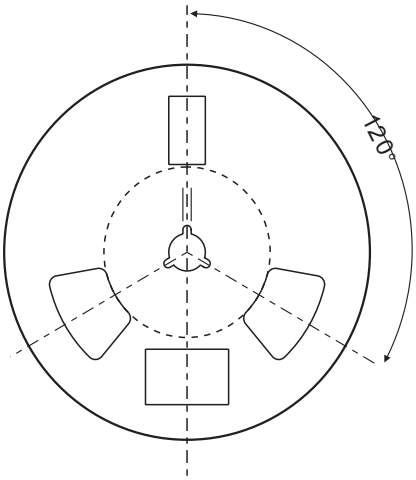
Fig.2 - Leakage current V.S. Junction Temperature

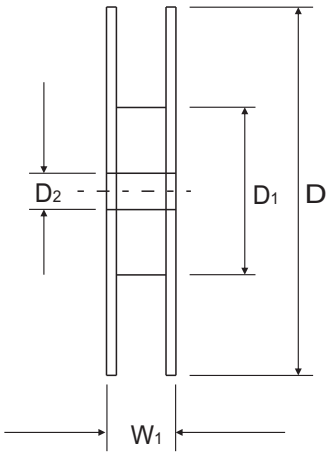


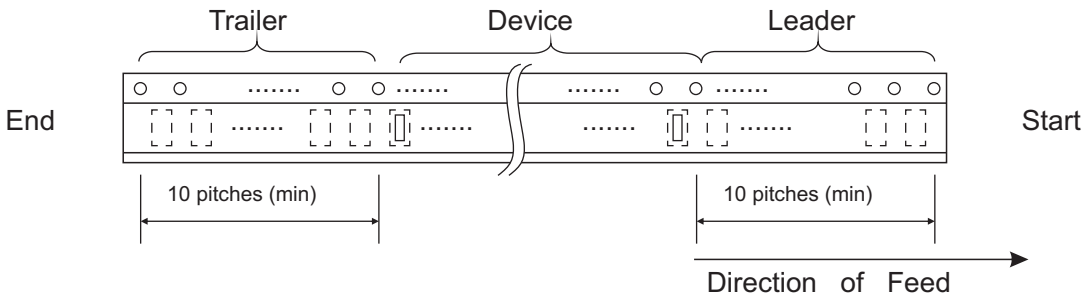
Reel Taping Specification











	SYMBOL	A	B	C	d	D	D1	D2
SOD-323	(mm)	1.52 ± 0.10	2.90 ± 0.10	1.35 ± 0.10	1.50 ± 0.10	178 ± 1	54.4 MIN.	13.0 ± 0.20
	(inch)	0.060± 0.004	0.114 ± 0.004	0.053 ± 0.004	0.059 ± 0.004	7.008 ± 0.040	2.142 MIN.	0.512 ± 0.008

	SYMBOL	E	F	P	P0	P1	W	W1
SOD-323	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 ± 0.30	9.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 ± 0.012	0.374 MAX

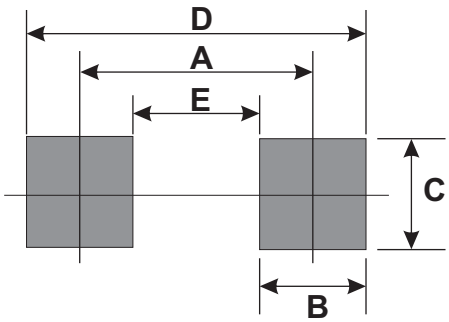
Marking Code

Part Number	Marking Code
CDSV4148-G	T4



Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.33	0.092
B	0.70	0.028
C	0.70	0.028
D	3.03	0.119
E	1.63	0.064



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7