



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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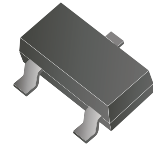


CDST-914-G

Reverse Voltage: 100 Volts

Forward Current: 300 mA

RoHS Device



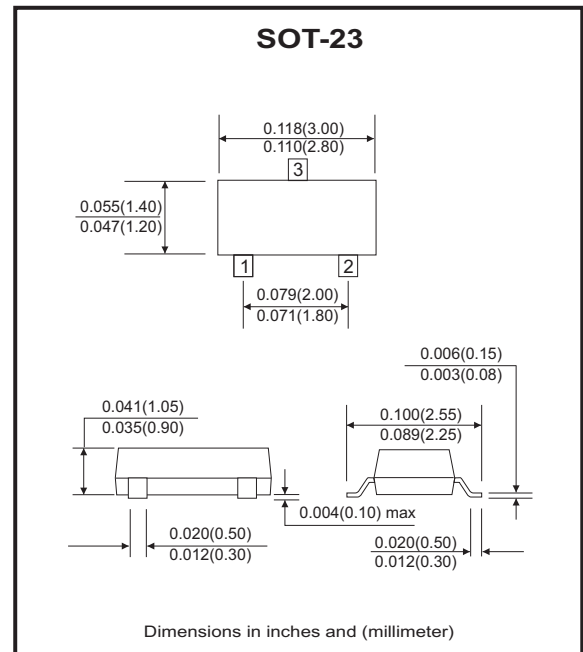
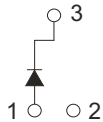
Features

- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.0078 grams

Circuit diagram



Maximum Ratings and Electrical Characteristics, Single Diode

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Peak Repetitive peak reverse voltage	V_{RRM}				100	V
RMS reverse voltage	V_{RMS}				70	V
DC Blocking voltage	V_{DC}				100	V
Average forward current	I_O				300	mA
Peak forward surge current	I_{FSM}				0.5	A
Power dissipation	P_D				350	mW
Thermal resistance junction to ambient	$R_{\theta JA}$				357	°C/W
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	100			V
Forward voltage	V_F	$@I_F=1mA$ $@I_F=10mA$ $@I_F=50mA$ $@I_F=150mA$			0.715 0.855 1.0 1.25	V
Reverse current	I_R	$@V_R=75V$ $@V_R=20V$			1.0 25	μA nA
Reverse recovery time	T_{rr}	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R$ $R_L=100\Omega$			4	nS
Capacitance between terminals	C_T	$V_R=0V, f=1.0MHz$			2	pF
Junction temperature	T_J				+150	°C
Storage temperature	T_{STG}		-65		+150	°C

RATING AND CHARACTERISTIC CURVES (CDST-914-G)

Fig.1 - Forward Characteristics

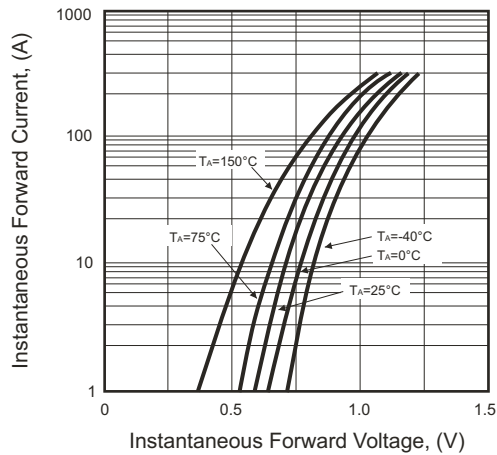


Fig.2 - Power Derating Curve

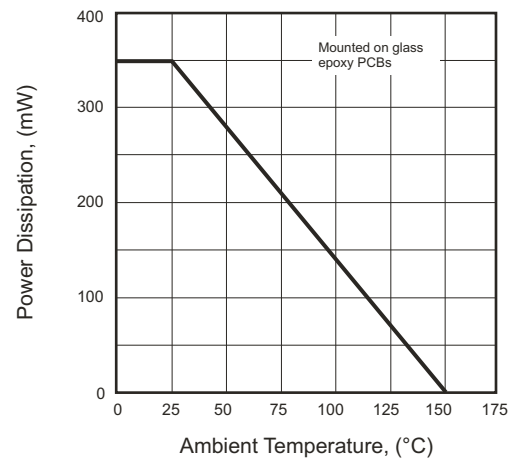


Fig.3 - Reverse Characteristics

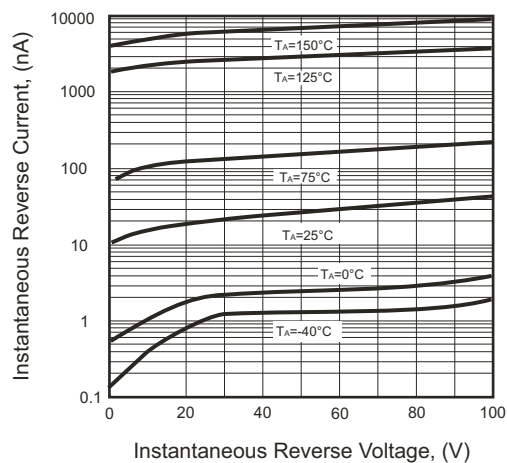


Fig.4 - Typical Capacitance vs. Reverse Voltage

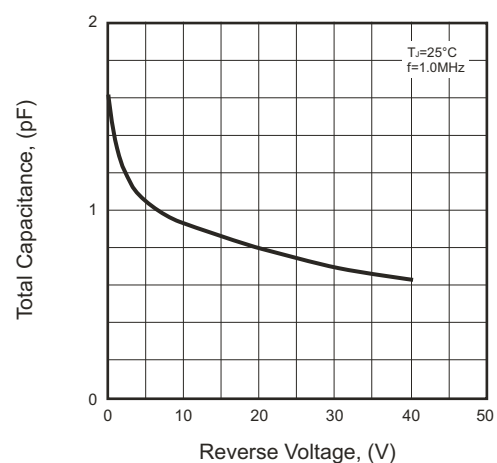


Fig.5 - Forward Characteristics

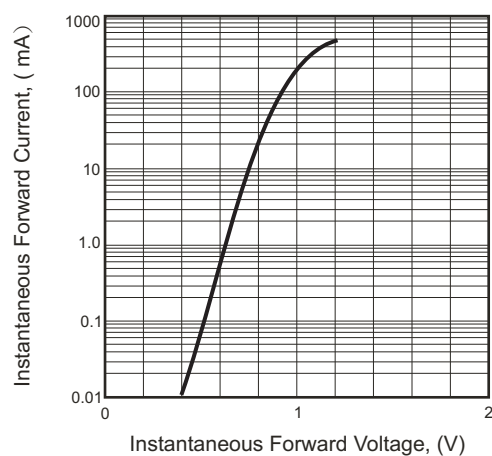
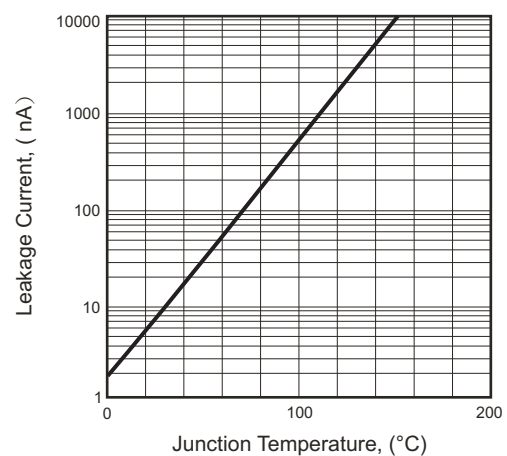
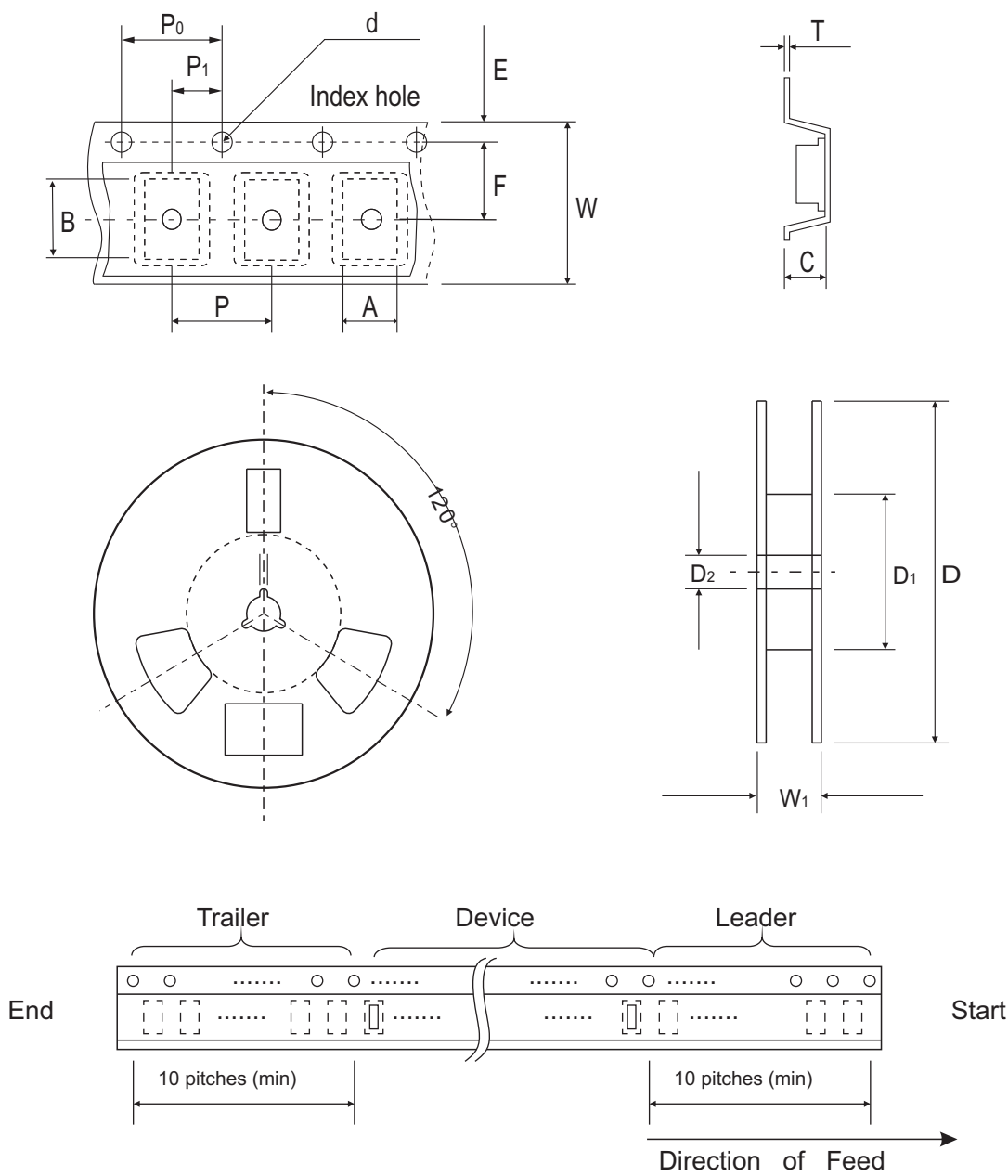


Fig.6 - Leakage Current vs Junction Temperature



Reel Taping Specification

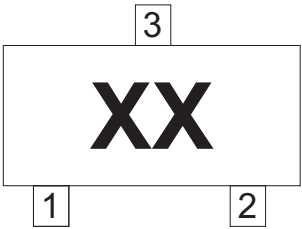


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 \pm 0.30 / - 0.10$	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	$0.315 \pm 0.012 / - 0.004$	0.374 ± 0.039

Marking Code

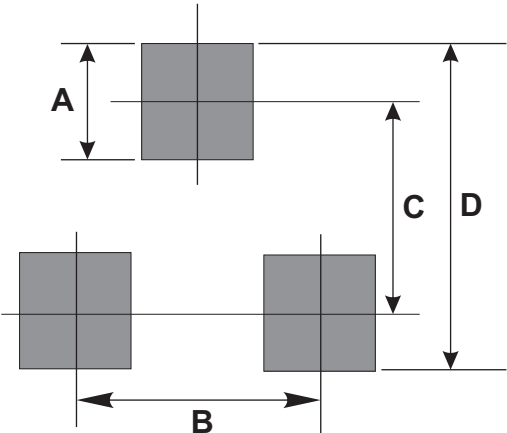
Part Number	Marking Code
CDST-914-G	5D



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	1.90	0.075
C	2.02	0.080
D	2.82	0.111



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7