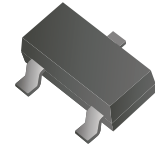


CDST-16-G/4148-G/914-G

Reverse Voltage: 75 Volts

Forward Current: 200 mA

RoHS Device



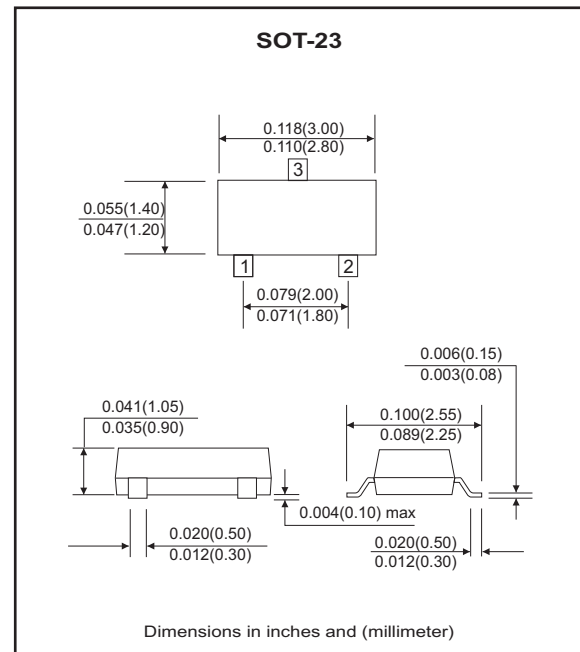
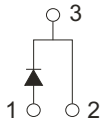
Features

- 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

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	CDST-16-G	CDST-4148-G	CDST-914-G	Units
Non-Pepetitive peak reverse voltage	V _{RM}		100	100	100	V
Peak Repetitive peak reverse voltage	V _{RRM}					
Working peak reverse voltage	V _{RWM}		75	75	100	V
DC Blocking voltage	V _R					
Average rectified output current	I _O		150	150	300	mA
Peak forward surge current	I _{FSM}	T=1.0 μS	2.0	2.0	0.5	A
Power dissipation	P _D		225	350	350	mW
Min. reverse breakdown voltage	V _{(BR)R}	I _R =100μA	75	75	100	V
Maximum 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
Maximum reverse current	I _R	@V _R =20V @V _R =75V	1.0	0.025 2.5	1.0	μA
Maximum reverse recovery time	T _{rr}	I _F =I _R =10mA, 1τ _{rr} =0.1*I _R R _L =100Ω	6	4	4	nS
Maximum diode capacitance	C _J	V _R =0V, f=1.0MHz		2		pF
Junction temperature	T _J			150		°C
Storage temperature	T _{STG}			-55 to +150		°C

RATING AND CHARACTERISTIC CURVES (CDST-16-G/4148-G/914-G)

Fig.1- Forward Characteristics

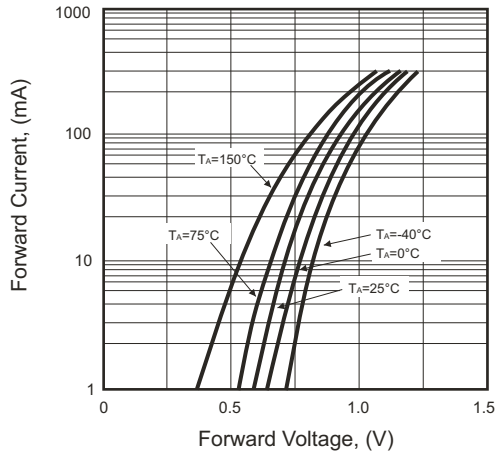


Fig.2- Reverse Characteristics

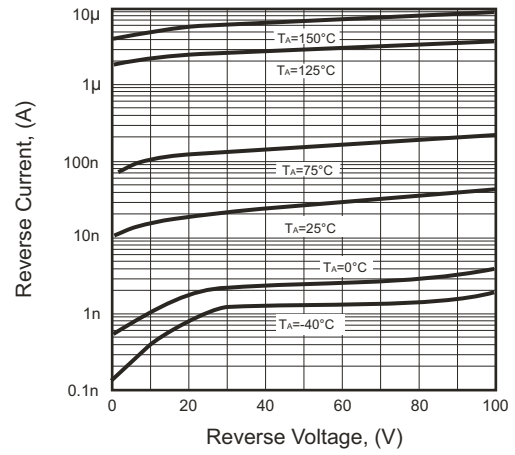


Fig.3- Capacitance Between Terminals Characteristics

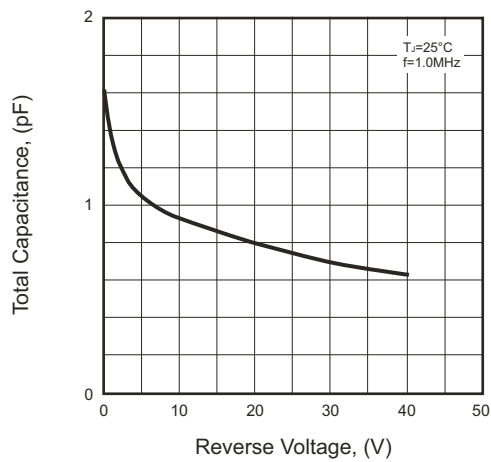


Fig.4- Power Derating Curve

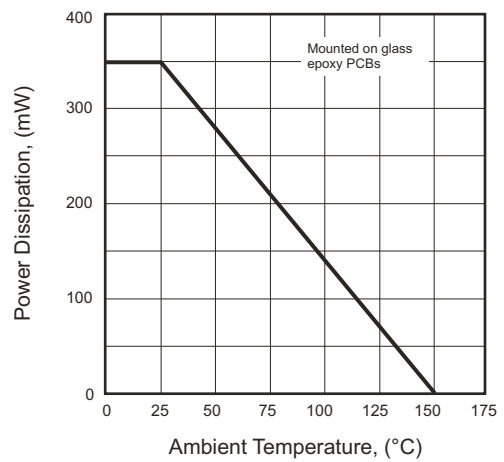


Fig.5- Forward Characteristics

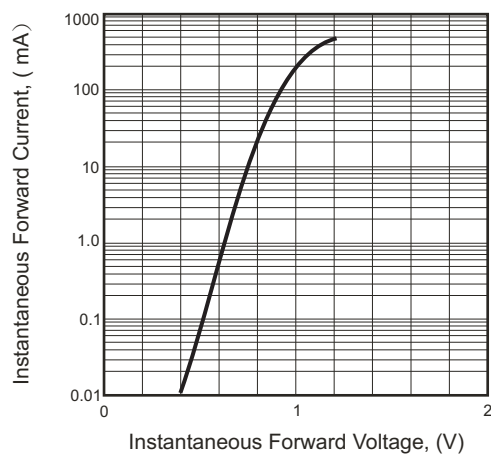
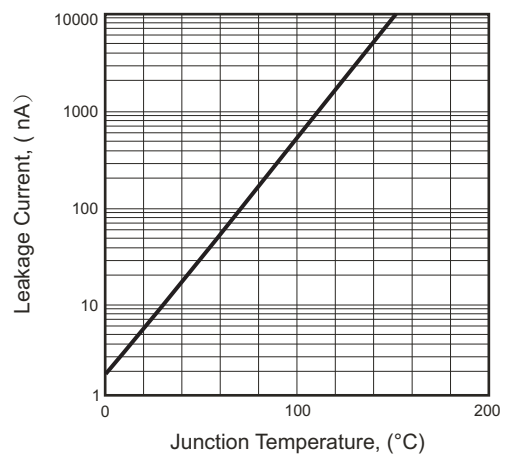
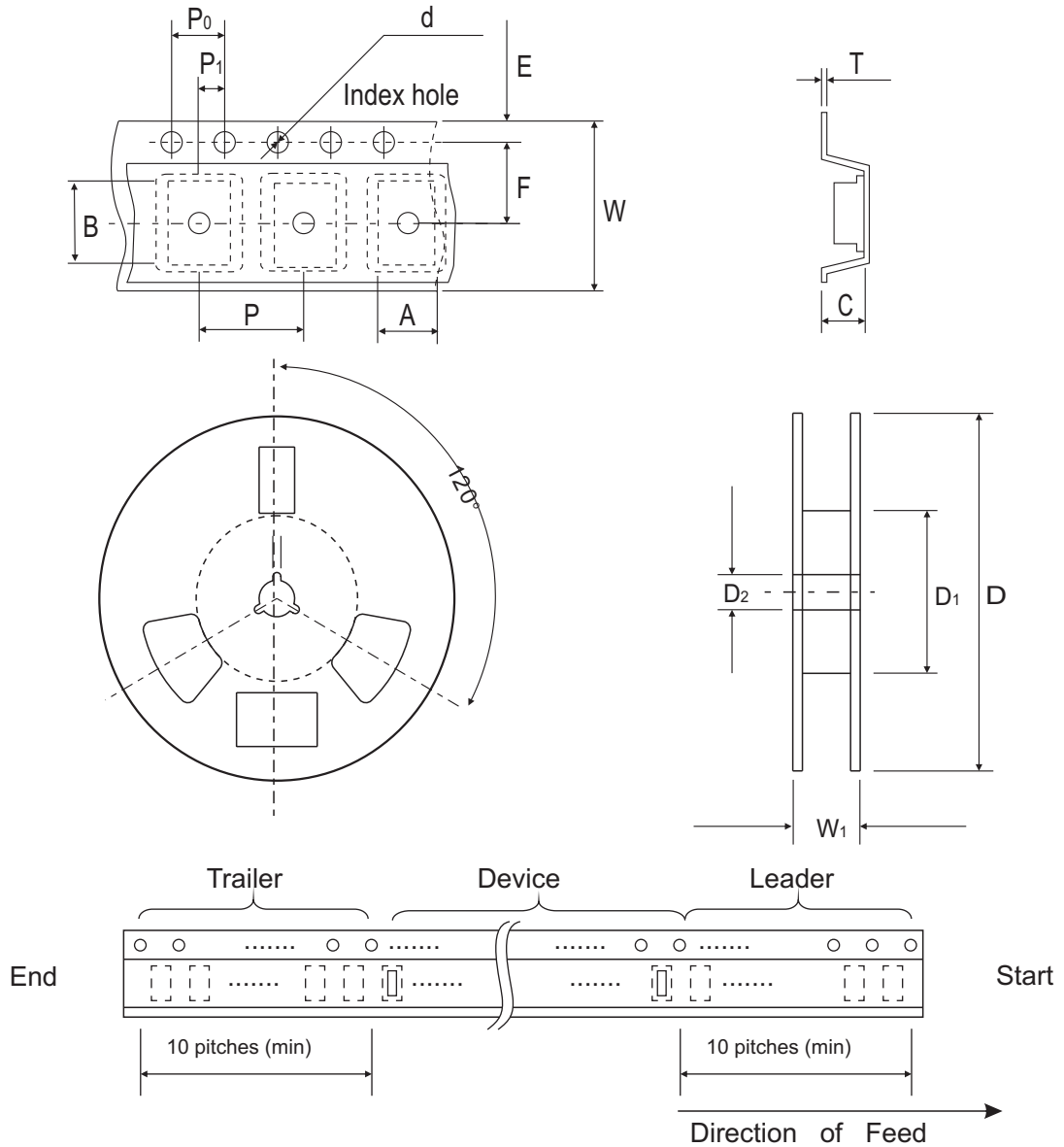


Fig.6- Leakage Current vs Junction Temperature



Reel Taping Specification

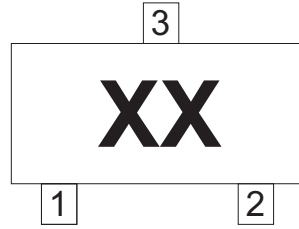


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

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 + 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

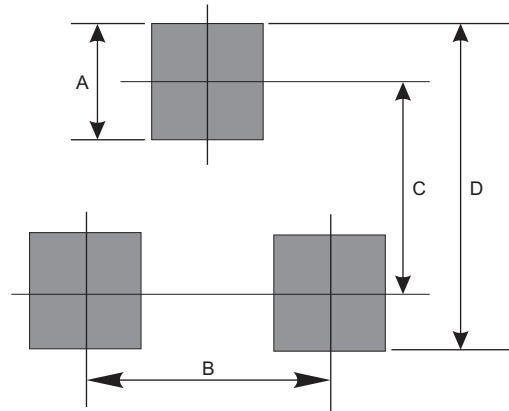
Part Number	Marking Code
CDST-16-G	A6
CDST-4148-G	KA2
CDST-914-G	5D



xx/xxx = 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 Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
SOT-23	3000	7