

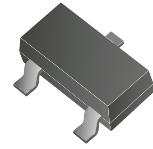
CDST-16-HF/4148-HF/914-HF

Reverse Voltage: 75 Volts

Forward Current: 200 mA

RoHS Device

Halogen Free



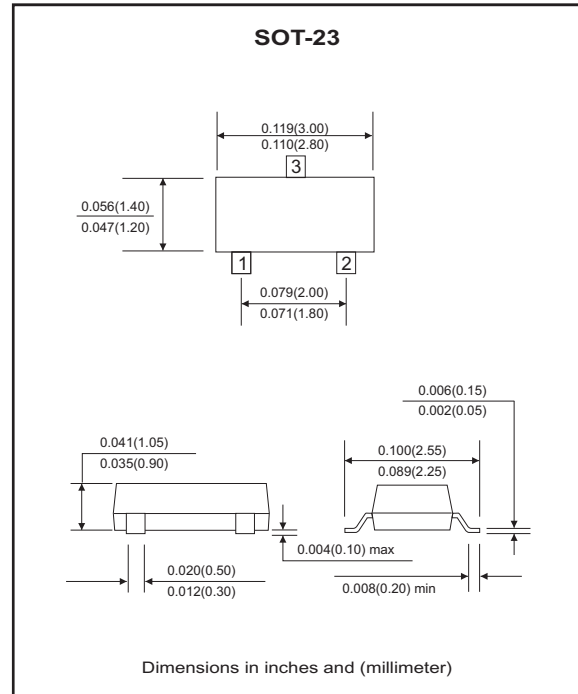
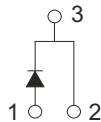
Features

- 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	Value	Units
Repetitive peak reverse voltage	V_{RRM}		75	V
Reverse voltage	V_R		75	V
Forward current	I_F		200	mA
Peak surge forward current	I_{FSM}	T=1.0 μ S	2	A
Power dissipation	P_D		225	mW
Maximum forward voltage	V_F	@ $I_F=1$ mA @ $I_F=10$ mA @ $I_F=50$ mA @ $I_F=150$ mA	0.715 0.855 1.0 1.25	V
Maximum reverse current	I_R	@ $V_R=20$ V @ $V_R=75$ V @ $V_R=25$ V, $T_J=150^\circ$ C @ $V_R=75$ V, $T_J=150^\circ$ C	0.025 2.5 30 50	μ A
Maximum reverse recovery time	T_{rr}	$I_F=10$ mA, $V_R=6$ V	4	nS
Typical diode capacitance	C_J	$V_R=0$ V, $f=1.0$ MHz	2	pF
Maximum junction temperature	T_J		150	$^\circ$ C
Storage temperature	T_{STG}		-55 to +150	$^\circ$ C

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

Fig.1 - Forward Characteristics

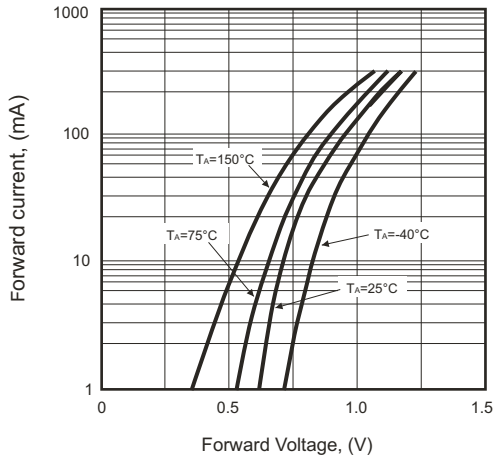


Fig.2 - Reverse Characteristics

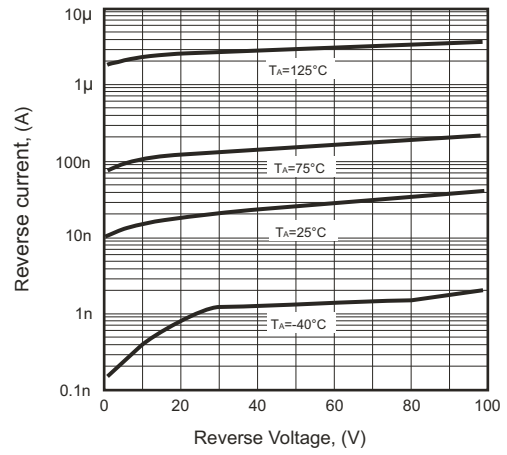


Fig.3 - Capacitance Between Terminals Characteristics

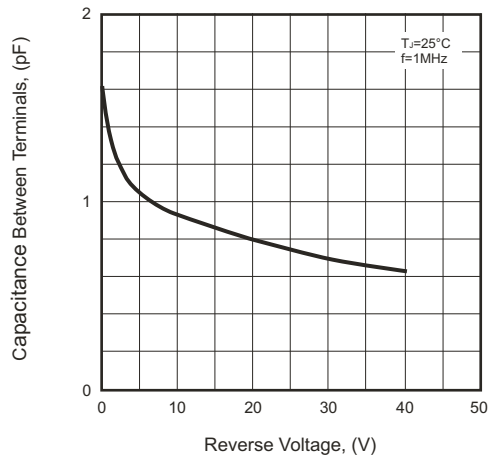
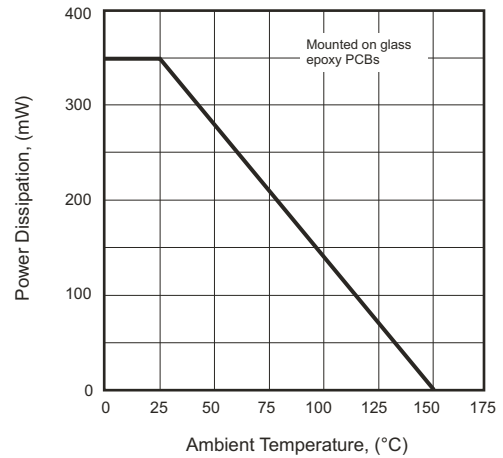
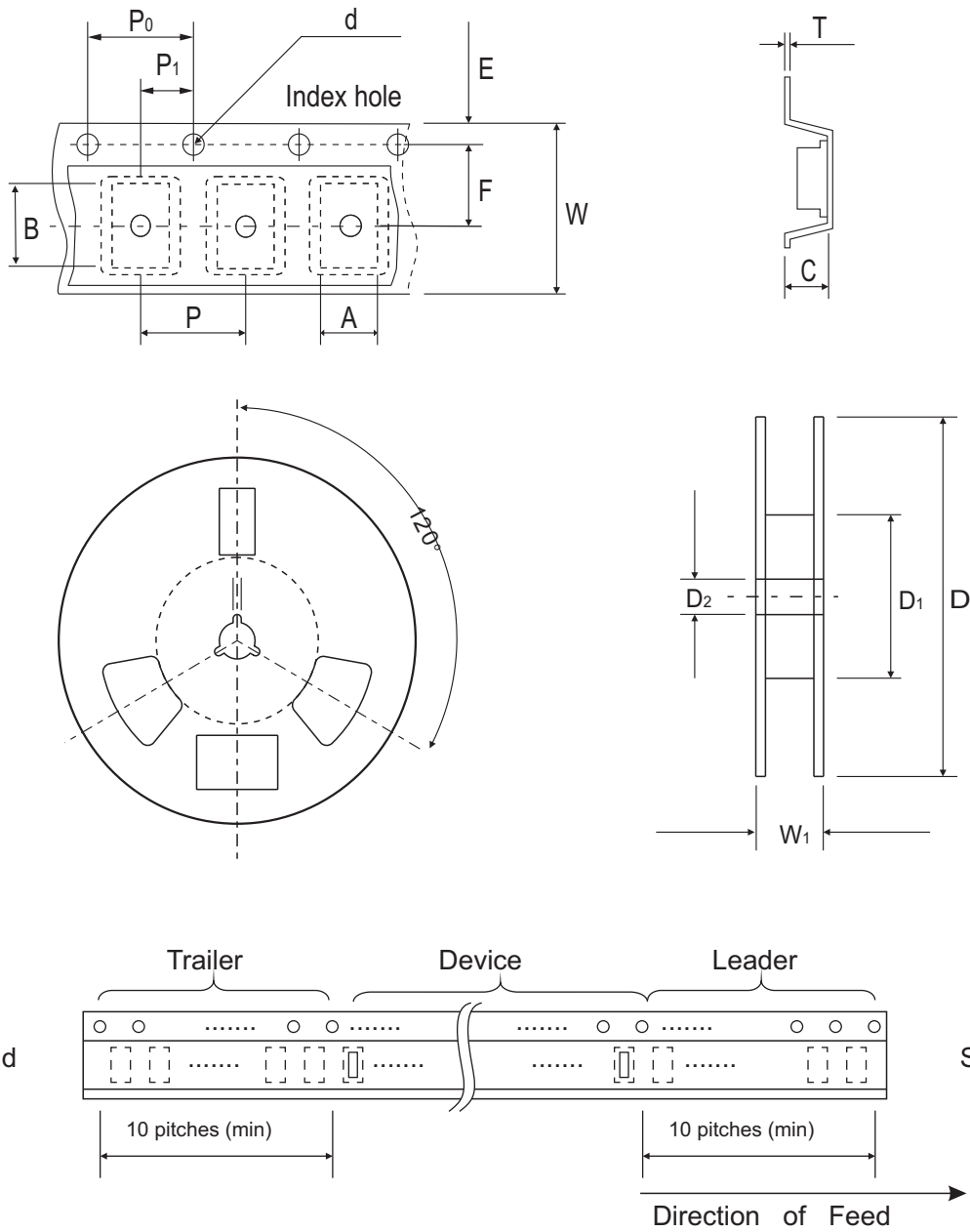


Fig.4 - Power Derating Curve



Reel Taping Specification

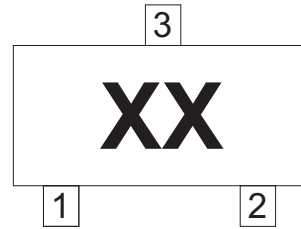


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.10 ± 0.10	2.85 ± 0.10	1.40 ± 0.10	1.55 ± 0.10	178 ± 1.00	54.00 (min)	13.00 ± 0.20
	(inch)	0.122 ± 0.004	0.112 ± 0.004	0.055 ± 0.004	0.061 ± 0.004	7.008 ± 0.039	1.969 (min)	0.512 ± 0.008

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 ± 0.05	8.00 ± 0.30	14.40 (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	0.567 (max)

Marking Code

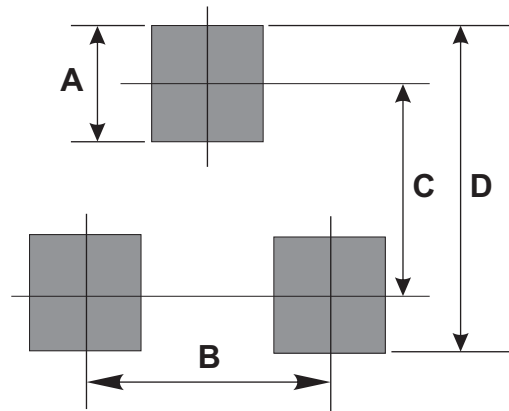
Part Number	Marking Code
CDST-16-HF	A6
CDST-4148-HF	KA2
CDST-914-HF	5D



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