

SMD Switching Diode

CDSX400B (RoHS Device)

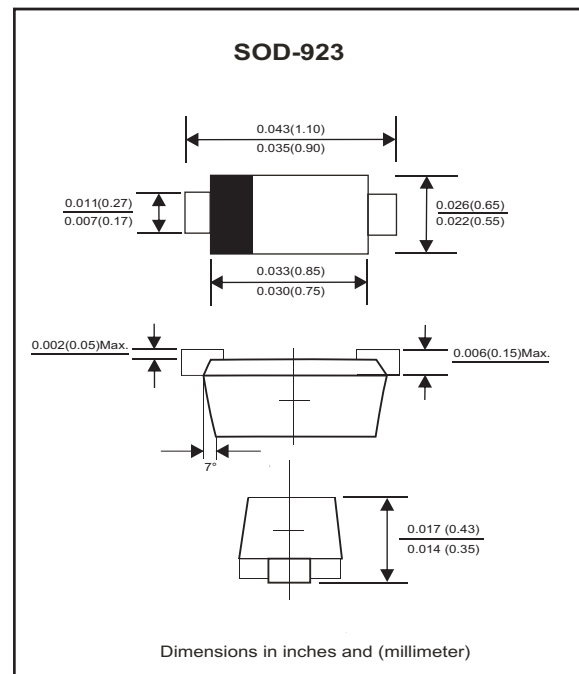
High Speed

Features

- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low leakage current.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOD-923 standard package, molded plastic.
- Terminals: solderable per MIL-STD-750 method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V _{RRM}			90	V
Reverse voltage		V _R			80	V
Average forward current		I _O			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}		500		mA
Repetitive peak forward current		I _{FRM}			225	mA
Power Dissipation		P _D			125	mW
Storage temperature		T _{STG}	-55		+150	°C
Junction temperature		T _J			+150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 100 mA	V _F			1.2	V
Reverse current	V _R = 80 V	I _R			0.1	uA
Capacitance between terminals	f = 1 MHz, and 0.5VDC reverse voltage	C _T		3		pF
Reverse recovery time	V _R = 6V ,I _F =10 mA, R _L =100 ohms	T _{rr}		4		nS

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RATING AND CHARACTERISTIC CURVES (CDSX400B)

Fig. 1 - Forward characteristics

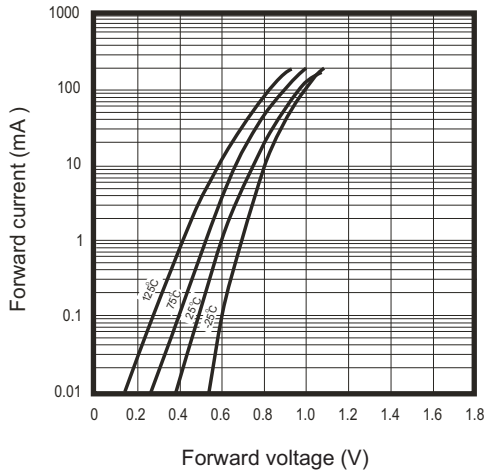


Fig. 2 - Reverse characteristics

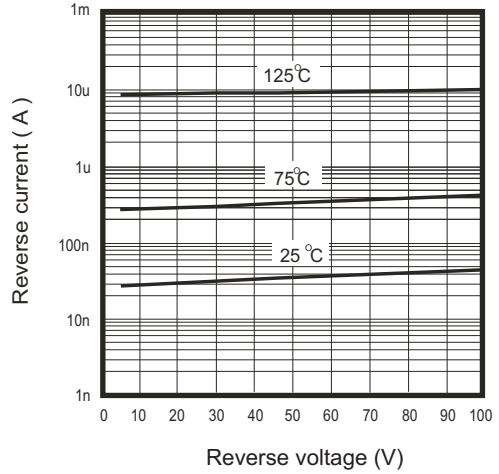


Fig. 3 - Capacitance between terminals characteristics

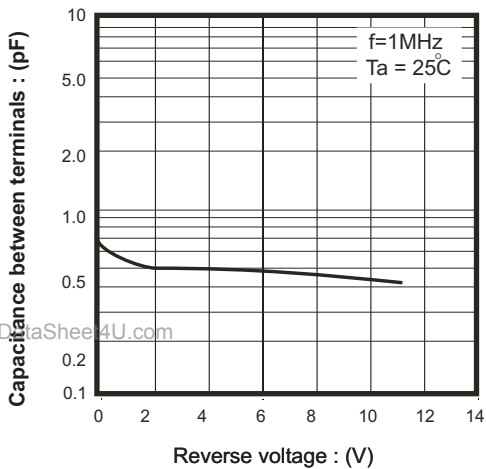


Fig. 4 - Current derating curve characteristics

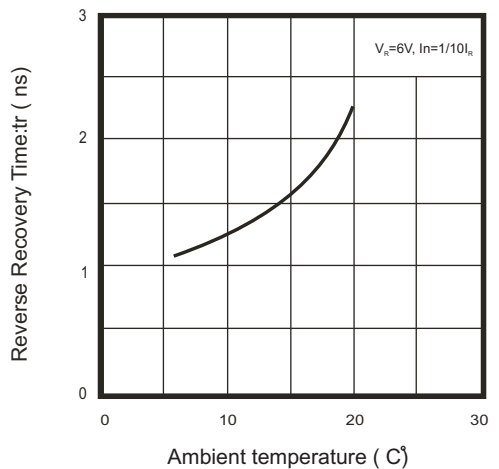


Fig. 5 - Surge current characteristics

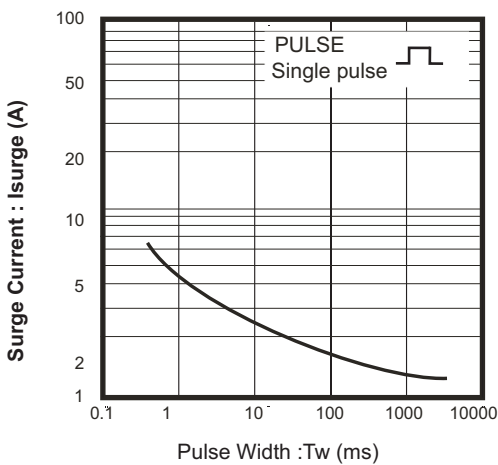
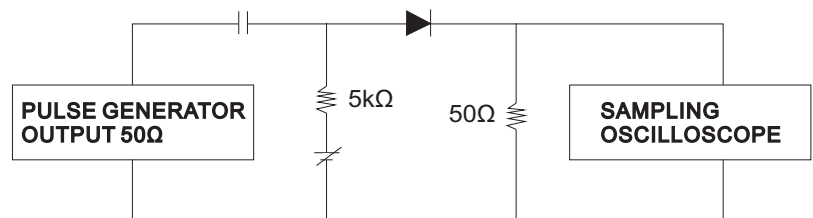
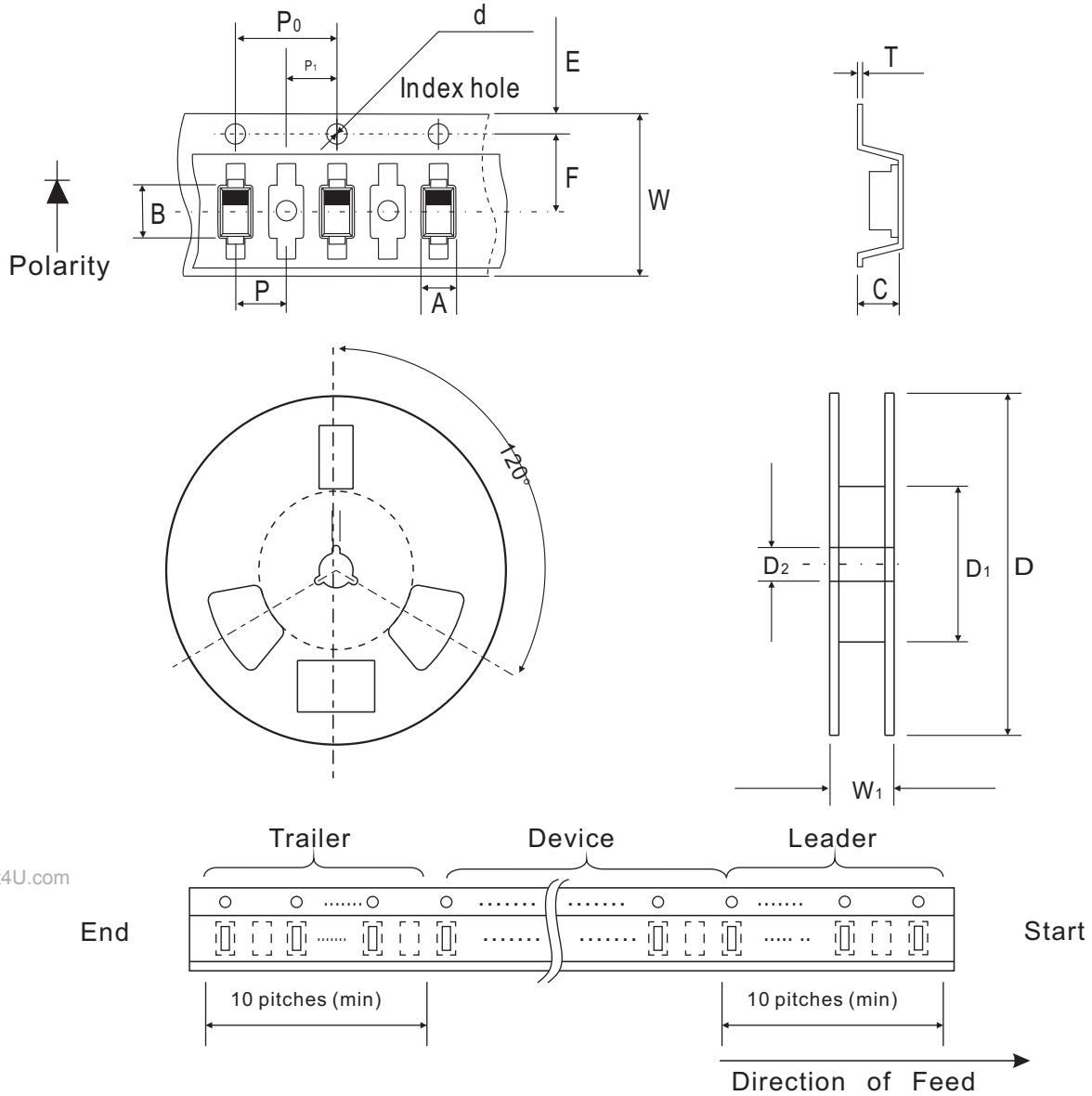


Fig. 6 - Reverse recovery time (trr) measurement circuit Surge current



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Reel Taping Specification



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SOD-923	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.68 ± 0.05	1.32 ± 0.05	0.46 ± 0.05	1.55 ± 0.10	178 ± 1	54.4 ± 0.4	1.30 ± 0.05
	(inch)	0.027 ± 0.002	0.052 ± 0.002	0.018 ± 0.002	0.061 ± 0.004	7.008 ± 0.04	2.142 ± 0.02	0.512 ± 0.002

SOD-923	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	8.00 ± 0.15	12.3 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 ± 0.006	0.484 ± 0.040

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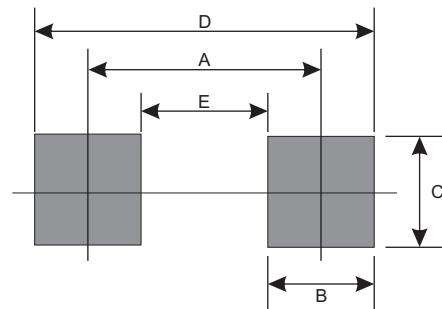
Marking Code

Part Number	Marking Code
CDSX400B	L



Suggested PAD Layout

SIZE	SOD-923	
	(mm)	(inch)
A	0.80	0.031
B	0.50	0.020
C	0.62	0.024
D	1.30	0.051
E	0.30	0.012



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
SOD-923	3000	7