

SMD Switching Diode

Comchip
SMD Diode Specialist

CDSER400 RoHS Device

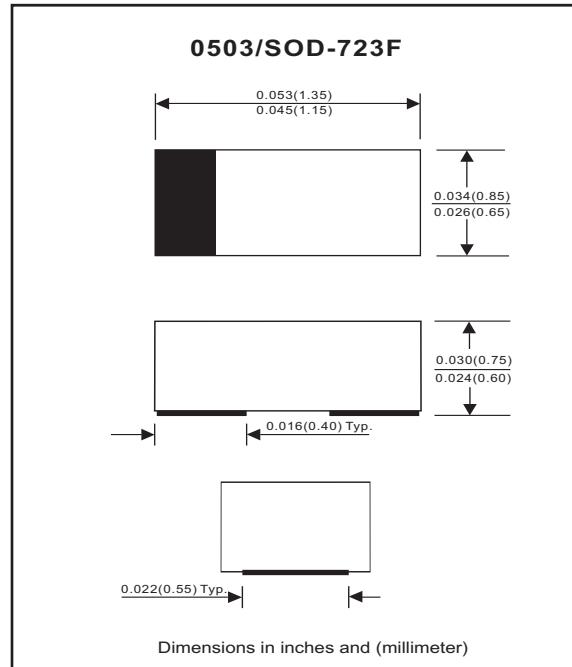


Features

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

Mechanical data

- Case: 0503/SOD-723F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.002 gram(approx.).



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}		1000		mA
Repetitive peak forward current		I _{FRM}			225	mA
Power Dissipation		P _D			150	mW
Storage temperature		T _{STG}	-40		+125	°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 = 100 mA DC	V _F			1.0	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 =50 ohms	T _{rr}		4		nS

REV:B

RATING AND CHARACTERISTIC CURVES (CDSER400)

Fig. 1 - Forward characteristics

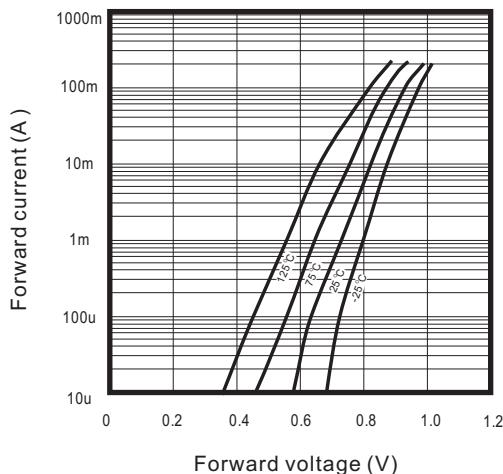


Fig. 2 - Reverse characteristics

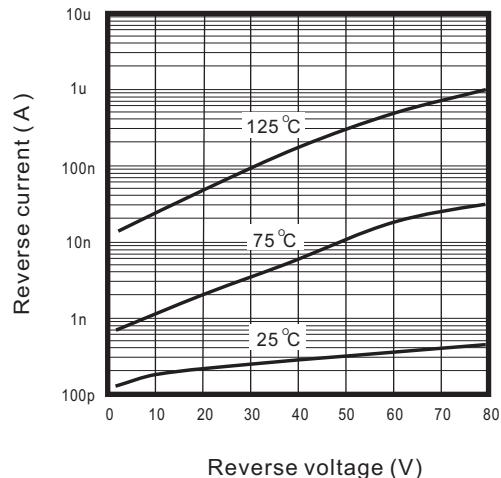


Fig. 3 - Capacitance between terminals characteristics

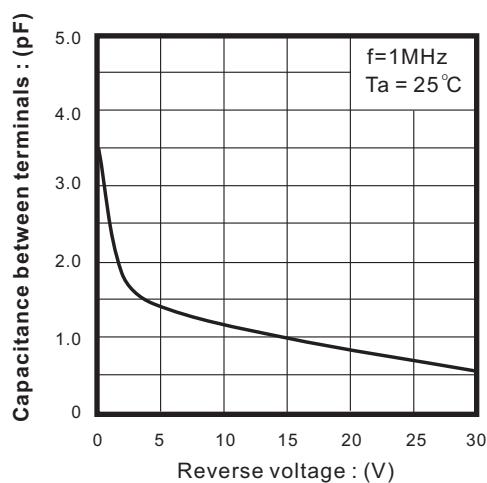
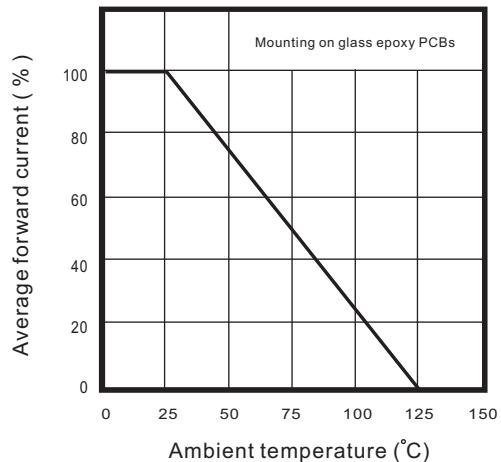
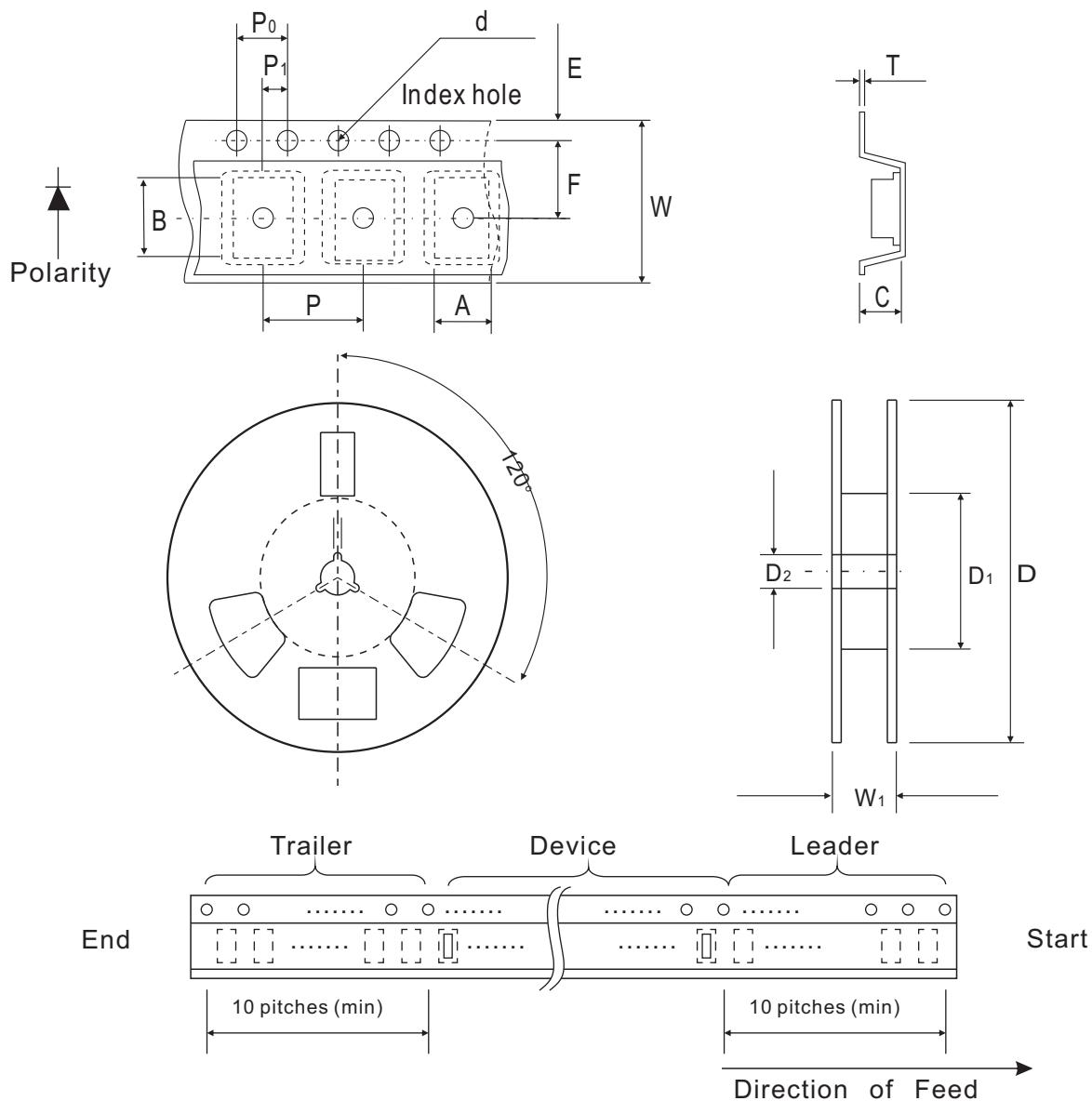


Fig. 4 - Current derating curve



Reel Taping Specification



0503 (SOD-723F)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.90±0.10	1.46±0.10	0.80±0.10	1.55±0.05	178±1	60.0 MIN.	13.0±0.20
	(inch)	0.035±0.004	0.057±0.004	0.031±0.004	0.061±0.002	7.008±0.04	2.362 MIN.	0.512±0.008

0503 (SOD-723F)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75±0.10	3.50±0.05	4.00±0.10	4.00±0.10	2.00±0.10	0.22±0.05	8.00±0.20	13.5 MAX.
	(inch)	0.069±0.004	0.138±0.002	0.157±0.004	0.157±0.004	0.079±0.004	0.008±0.002	0.315±0.008	0.531 MAX.

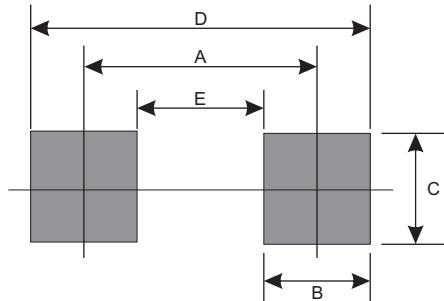
Marking Code

Part Number	Marking Code
CDSER400	S1



Suggested PAD Layout

SIZE	0503/SOD-723F	
	(mm)	(inch)
A	0.85	0.033
B	0.55	0.022
C	0.85	0.033
D	1.40	0.055
E	0.30	0.012



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0503/SOD-723F	4000	7