

## CDSUC4148-HF

### High-Reliability and High-Performance

### RoHS Device

### Halogen Free



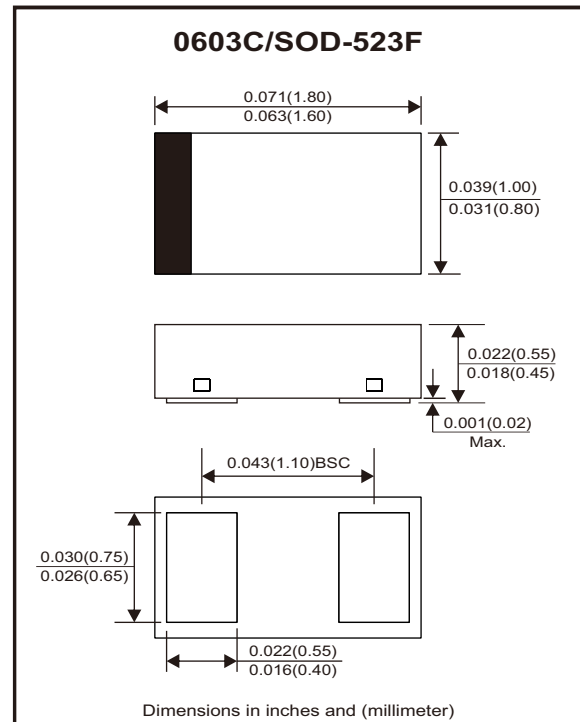
#### Features

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

#### Mechanical data

- Case: 0603C/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.003 grams (approx.).

#### Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V <sub>RRM</sub>			100	V
Reverse voltage		V <sub>R</sub>			75	V
Average forward current		I <sub>O</sub>			150	mA
Forward current, surge peak	T <sub>p</sub> = 1μS T <sub>p</sub> = 1mS	I <sub>FSM</sub>		4 1		A
Power dissipation		P <sub>D</sub>			150	mW
Operating temperature range		T <sub>J</sub>	-40		+125	°C
Storage temperature range		T <sub>STG</sub>	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 50mA DC	V <sub>F</sub>			1.0	V
Reverse current	V <sub>R</sub> = 20V V <sub>R</sub> = 75V	I <sub>R</sub>			25 2.5	nA μA
Capacitance between terminals	f = 1MHz, and 0 VDC reverse voltage	C <sub>T</sub>			4	pF
Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> = 10mA, R <sub>L</sub> = 100 ohms, I <sub>rr</sub> = 1mA	T <sub>rr</sub>			4	nS

## Rating and Characteristic Curves (CDSUC4148-HF)

Fig.1 - Forward Characteristics

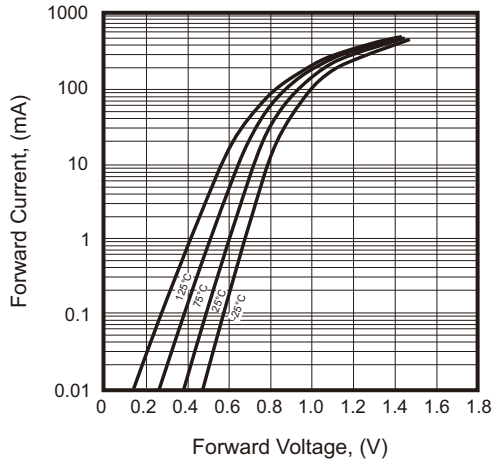


Fig.2 - Reverse Characteristics

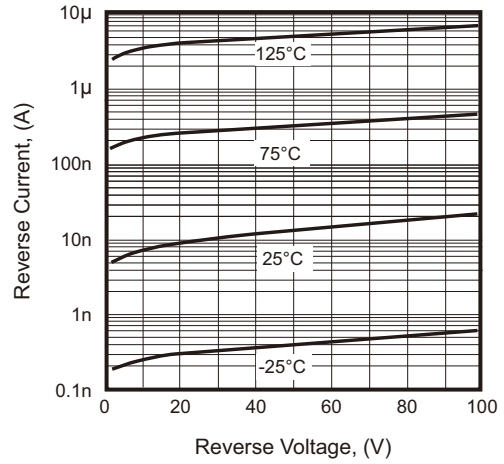


Fig.3 - Capacitance Between Terminals Characteristics

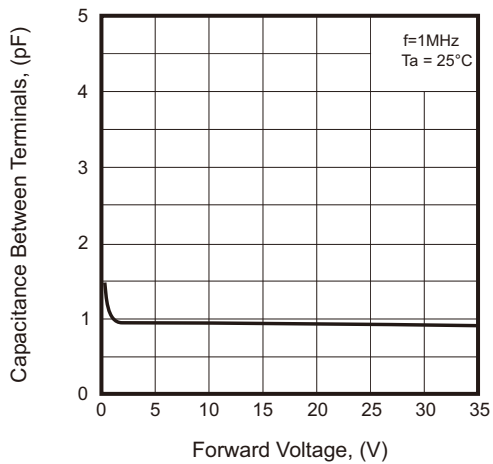
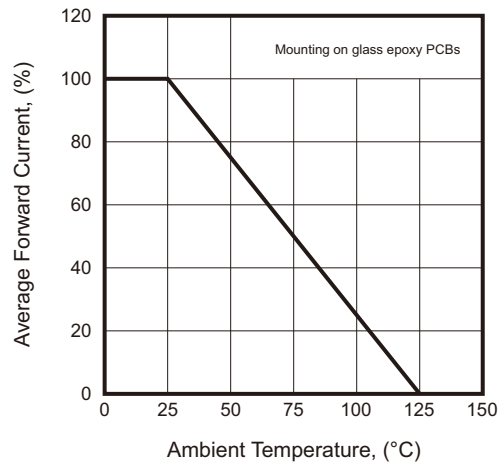
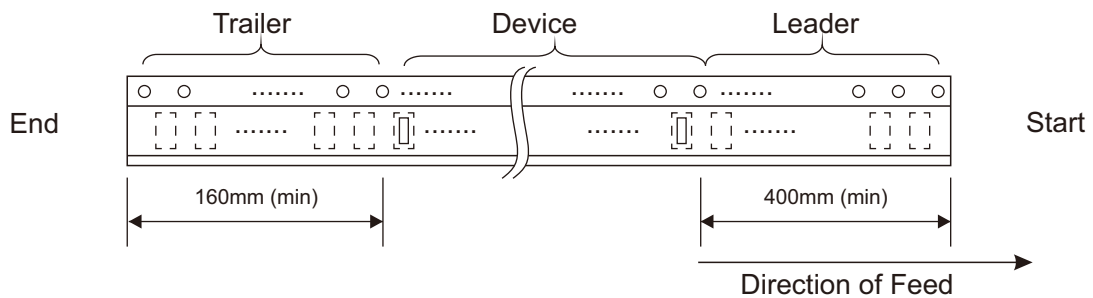
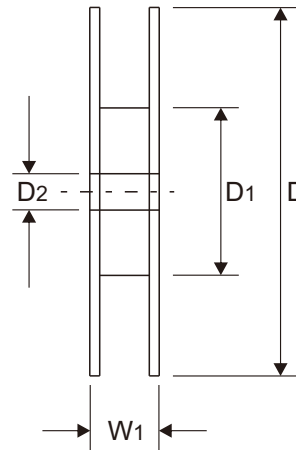
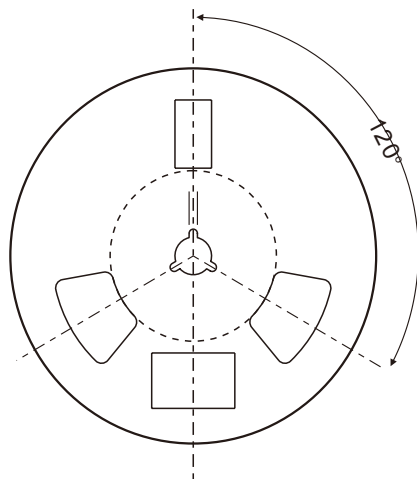
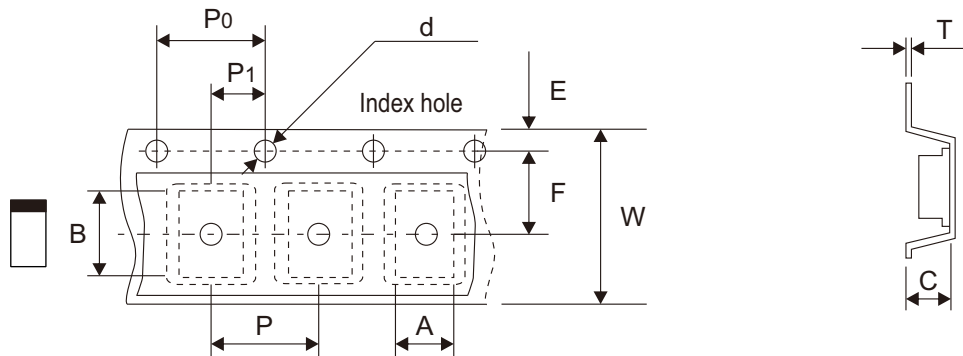


Fig.4 - Current Derating Curve



## Reel Taping Specification

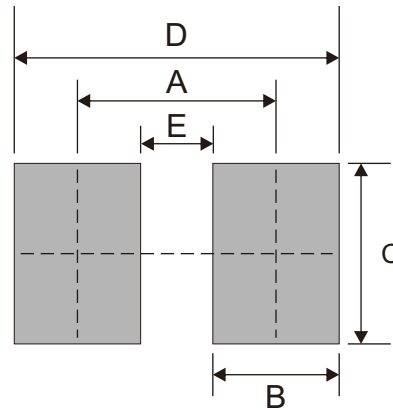


0603C (SOD-523F)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.05 ± 0.05	1.96 ± 0.05	0.57 ± 0.05	1.50 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.041 ± 0.002	0.077 ± 0.002	0.022 ± 0.002	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

0603C (SOD-523F)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.05	2.00 ± 0.05	0.20 ± 0.03	8.00 ± 0.20	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.002	0.079 ± 0.002	0.008 ± 0.001	0.315 ± 0.008	0.472 + 0.020 - 0.000

## Suggested P.C.B. PAD Layout

SIZE	0603C/SOD-523F	
	(mm)	(inch)
A	1.10	0.043
B	0.70	0.028
C	1.00	0.039
D	1.80	0.071
E	0.40	0.016



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
0603C/SOD-523F	4,000	7

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for* [Diodes - General Purpose, Power, Switching category:](#)

*Click to view products by* [Comchip manufacturer:](#)

Other Similar products are found below :

[RD0306T-H](#) [DSE010-TR-E](#) [BAV17-TR](#) [BAV19-TR](#) [1N3611](#) [NTE156A](#) [NTE525](#) [NTE571](#) [NTE574](#) [NTE5804](#) [NTE5806](#) [NTE6244](#)  
[1SS181-TP](#) [1SS193,LF](#) [1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [LS4151GS08](#) [FC903-TR-E](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#)  
[1N914B](#) [1N914BTR](#) [RFUH20TB3S](#) [BAS 28 E6327](#) [BAV199-TP](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#)  
[JAN1N3600](#) [LL4151-GS18](#) [053684A](#) [SMMSD4148T3G](#) [707803H](#) [NSVDAN222T1G](#) [SP000010217](#) [CDSZC01100-HF](#)  
[BAV199E6433HTMA1](#) [BAV70M3T5G](#) [SMBT2001T1G](#) [NTE5801](#) [NTE5800](#) [NTE5808](#) [NTE6240](#) [NTE6248](#) [BAS28-7](#) [BAW56HDW-13](#)  
[BAS28 TR](#)