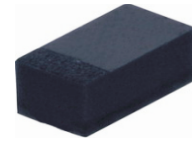


## CDBQR42/43-HF

**Io = 200 mA**  
**VR = 30 Volts**  
**RoHS Device**  
**Halogen Free**

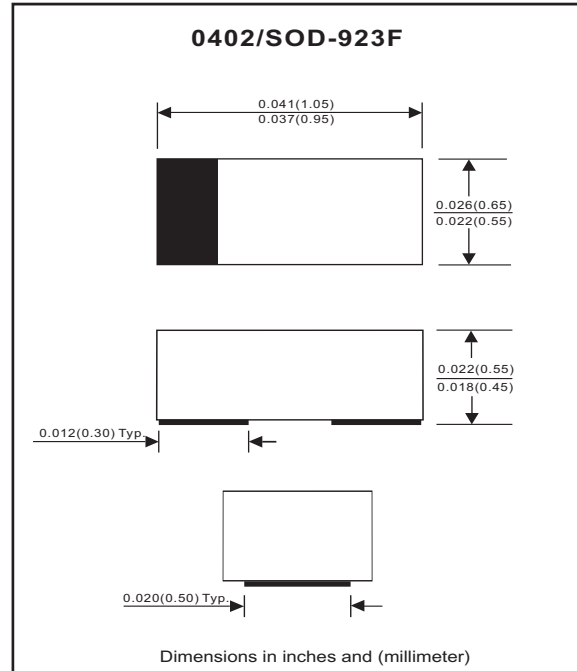


### Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Majority carrier conduction.

### Mechanical data

- Case: 0402/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Marking code:  
 CDBQR42-HF : BD  
 CDBQR43-HF : BE
- Mounting position: Any
- Weight: 0.001 gram(approx.).



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		VRM			30	V
Reverse voltage		VR			30	V
RMS reverse voltage		VR(RMS)			21	V
Average forward rectified current		Io			200	mA
Repetitive peak forward current		IFRM			0.5	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	IFSM			4	A
Power dissipation		Pd			125	mW
Thermal resistance junction to ambient air		RθJA			667	°C/W
Storage temperature		TSTG	-55		+125	°C
Junction temperature		Tj			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage CDBQR42/43-HF CDBQR42-HF CDBQR42-HF CDBQR43-HF CDBQR43-HF	IF = 200mA IF = 10mA IF = 50mA IF = 2mA IF = 15mA	VF			1 0.4 0.65 0.33 0.45	V
Reverse current	VR = 25V	IR			0.5	uA
Capacitance between terminals	f = 1 MHz, and 1 VDC reverse voltage	CT			10	pF
Reverse recovery time	IF=IR=10mA,Irr=0.1xIR,RL=100 ohm	Trr			5	nS

## RATING AND CHARACTERISTIC CURVES (CDBQR42/43-HF)

Fig. 1 - Forward characteristics

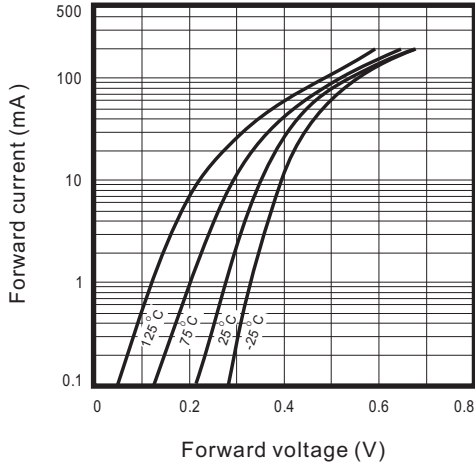


Fig. 2 - Reverse characteristics

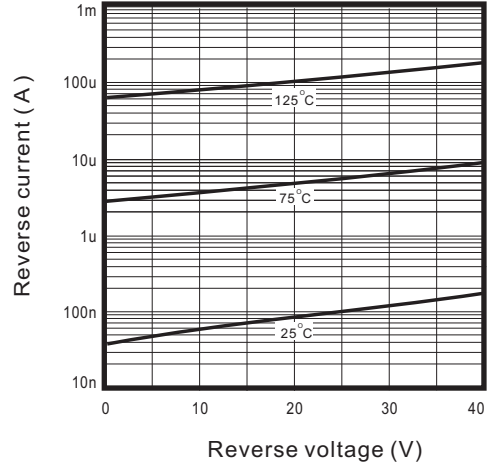


Fig.3 - Capacitance between terminals characteristics

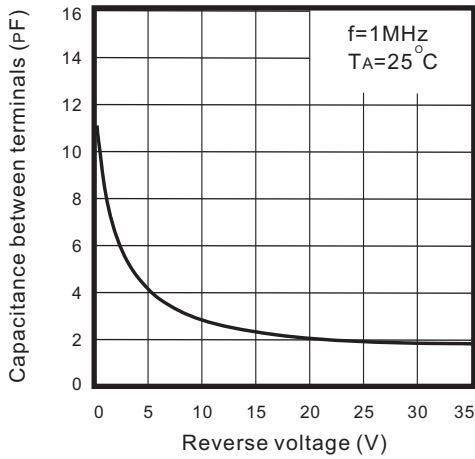
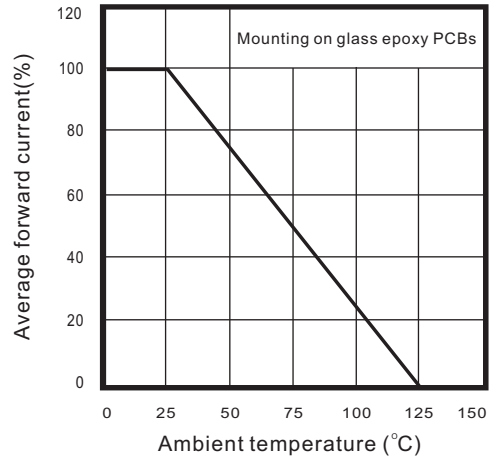
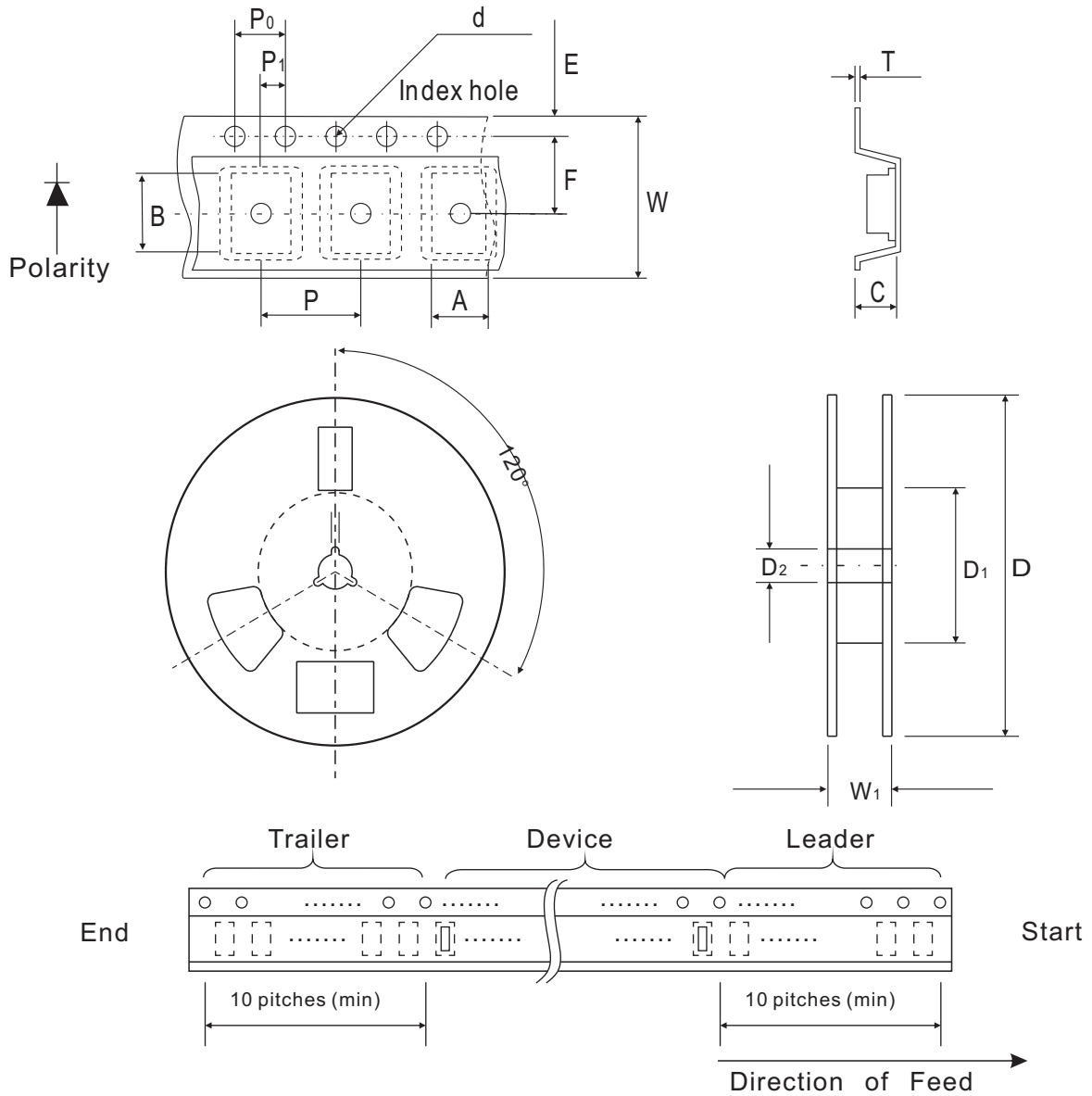


Fig.4 - Current derating curve



## Reel Taping Specification



0402 (SOD-923F)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.75 ± 0.10	1.15 ± 0.10	0.60 ± 0.10	1.55 + 0.10	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.026 ± 0.004	0.045 ± 0.004	0.024 ± 0.004	0.061 + 0.004	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0402 (SOD-923F)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(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	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

## Marking Code

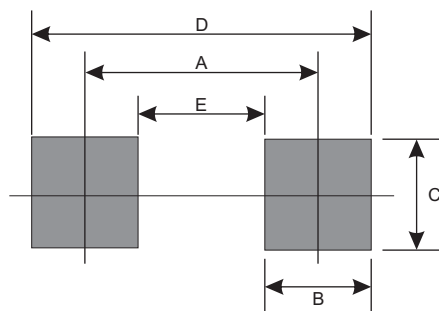
Park Number	Marking Code
CDBQR42-HF	BD
CDBQR43-HF	BE



xx = Product type marking code

## Suggested PAD Layout

SIZE	0402/SOD-923F	
	(mm)	(inch)
A	0.750	0.030
B	0.500	0.020
C	0.700	0.028
D	1.250	0.049
E	0.250	0.010



## Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-923F	5000	7

# Mouser Electronics

Authorized Distributor

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