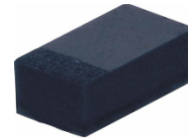


## CDBQR0230L-HF

$I_o = 200 \text{ mA}$   
 $V_R = 30 \text{ Volts}$   
 RoHS Device  
 Halogen Free



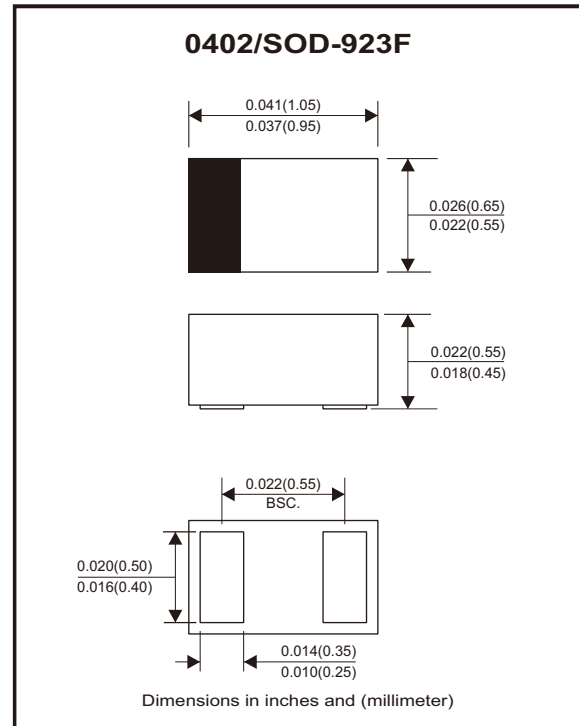
### Features

- 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.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.
- Weight: 0.001 grams (approx.).

### Circuit Diagram



### Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		$V_{RRM}$			35	V
Reverse voltage		$V_R$			30	V
Average forward current		$I_o$			200	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method) * 1cycle	$I_{FSM}$			1	A
Power dissipation		$P_d$			125	mW
Junction temperature range		$T_J$	-40		+125	$^\circ\text{C}$
Storage temperature range		$T_{STG}$	-40		+125	$^\circ\text{C}$

### Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 200\text{mA}$	$V_F$			0.5	V
Reverse current	$V_R = 10\text{V}$	$I_R$			30	$\mu\text{A}$

## Rating and Characteristic Curves (CDBQR0230L-HF)

Fig.1 - Forward Characteristics

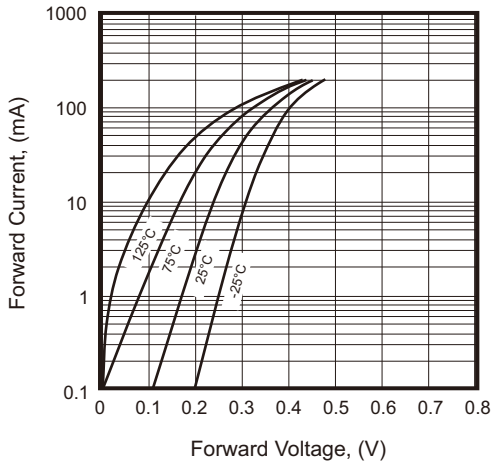


Fig.2 - Reverse Characteristics

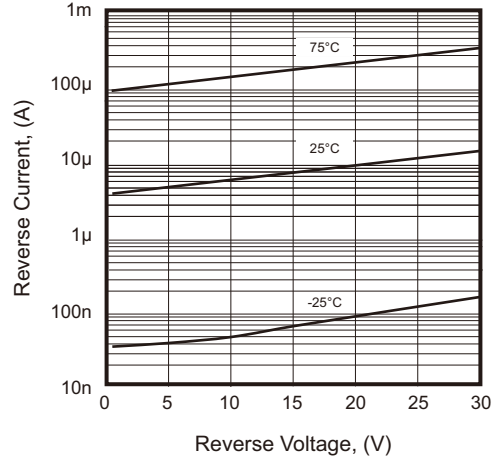


Fig.3 - Capacitance Between Terminals Characteristics

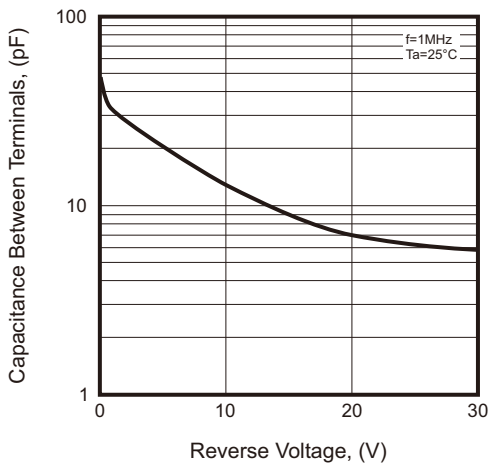
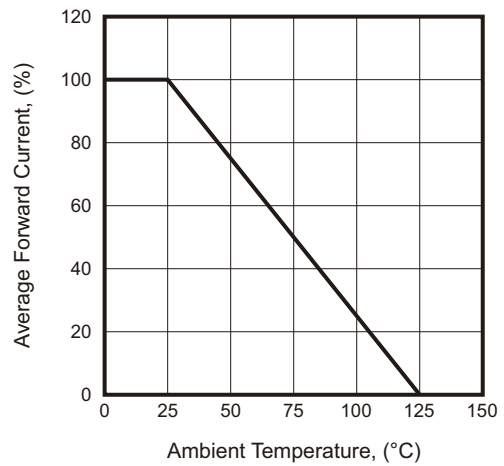
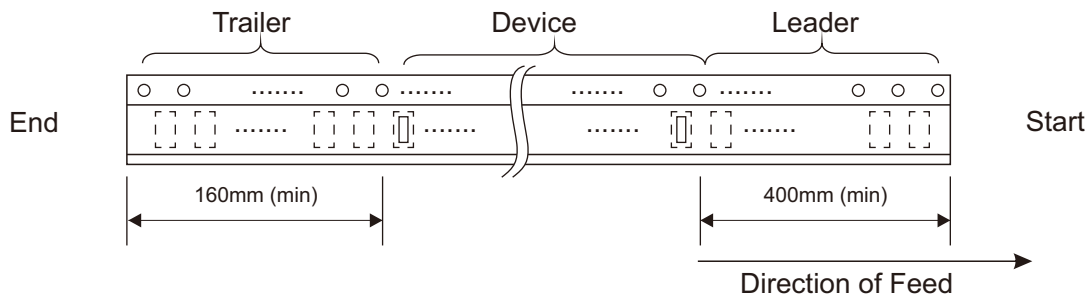
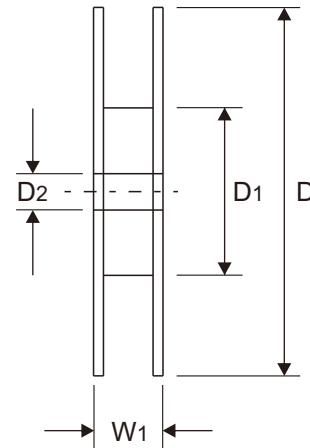
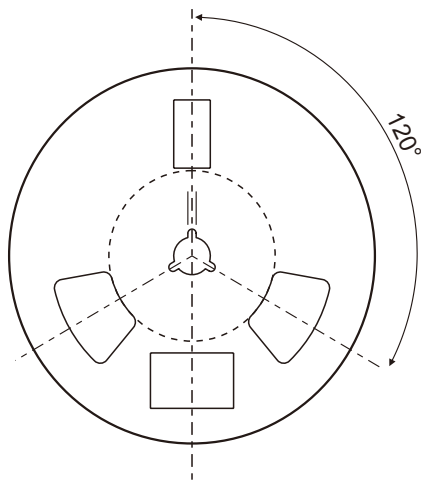
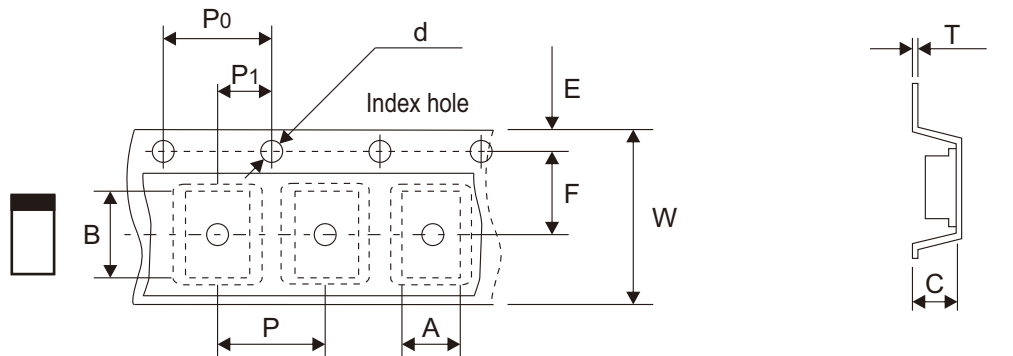


Fig.4 - Current Derating Curve



## Reel Taping Specification



0402 (SOD-923F)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$0.75 \pm 0.05$	$1.17 \pm 0.05$	$0.65 \pm 0.05$	$1.50 + 0.10$ $- 0.00$	$178.00 \pm 1.00$	$60.00 \pm 0.50$	$13.50 \pm 0.20$
	(inch)	$0.030 \pm 0.002$	$0.046 \pm 0.002$	$0.026 \pm 0.002$	$0.059 + 0.004$ $- 0.000$	$7.008 \pm 0.039$	$2.362 \pm 0.020$	$0.531 \pm 0.008$

0402 (SOD-923F)	SYMBOL	E	F	P	$P_0$	$P_1$	T	W	$W_1$
	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.20 + 0.02$ $- 0.05$	$8.00 \pm 0.20$	$12.00 + 0.50$ $- 0.00$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.008 + 0.001$ $- 0.002$	$0.315 \pm 0.008$	$0.472 + 0.020$ $- 0.000$

Company reserves the right to improve product design, functions and reliability without notice. REV:D

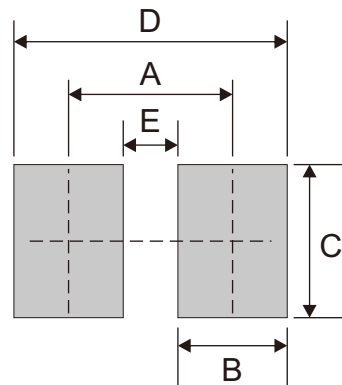
## Marking Code

Part Number	Marking Code
CDBQR0230L-HF	BA



## Suggested P.C.B. PAD Layout

SIZE	0402/SOD-923F	
	(mm)	(inch)
A	0.75	0.030
B	0.50	0.020
C	0.70	0.028
D	1.25	0.049
E	0.25	0.010



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
0402/SOD-923F	5,000	7