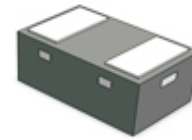


## ACDBQC0130L-HF

**$I_o = 100 \text{ mA}$**   
 **$V_R = 30 \text{ Volts}$**   
**RoHS Device**  
**Halogen Free**

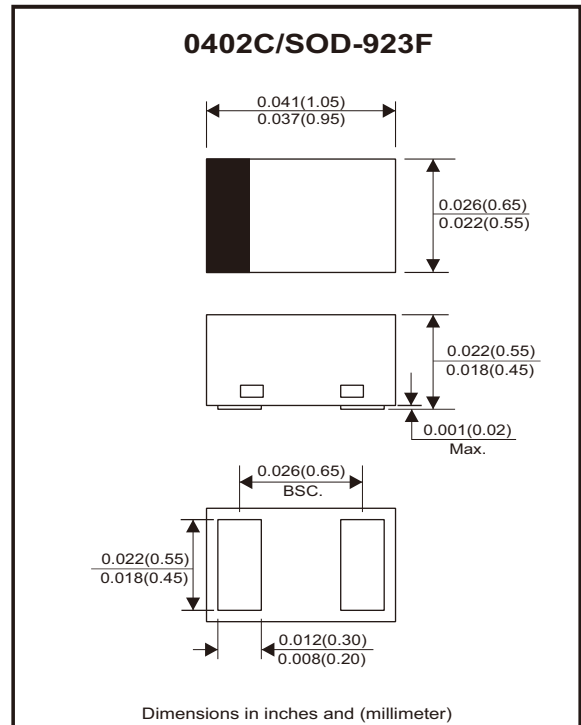


### Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin package.
- Majority carrier conduction.
- AEC-Q101 Qualified

### Mechanical data

- Case: 0402C/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- 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 rectified current |                                      | $I_o$           |     |     | 100  | mA                 |
| Peak forward surge current        | 8.3 ms single half sine-wave (1 cyc) | $I_{FSM}$       |     |     | 3    | A                  |
| Thermal resistance                | Junction to ambient                  | $R_{\theta JA}$ |     | 200 |      | $^\circ\text{C/W}$ |
| 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               | $I_F = 10\text{mA}$                  | $V_F$  |     | 0.25 | 0.30 | V             |
| Reverse current               | $V_R = 10\text{V}$                   | $I_R$  |     |      | 10   | $\mu\text{A}$ |
| Capacitance between terminals | $V_R = 1\text{V}, f = 1 \text{ MHz}$ | $C_T$  |     | 14   | 20   | pF            |

## Rating and Characteristic Curves (ACDBQC0130L-HF)

Fig.1 - Forward Characteristics

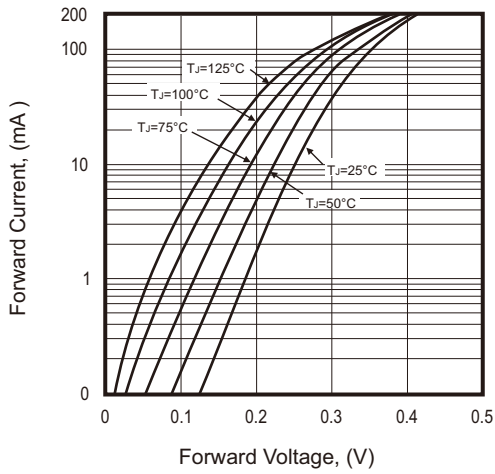


Fig.2 - Reverse Characteristics

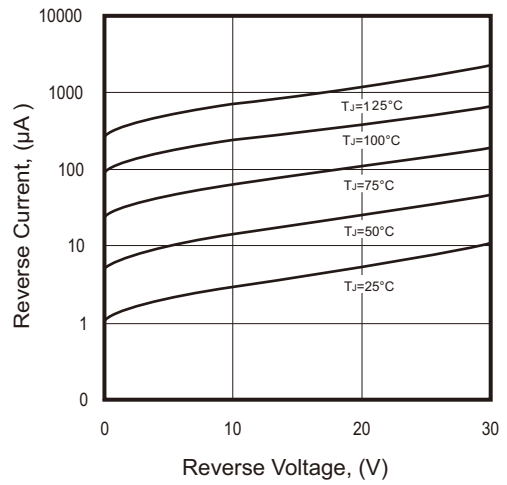


Fig.3 - Typical Capacitance Between Terminals Characteristics

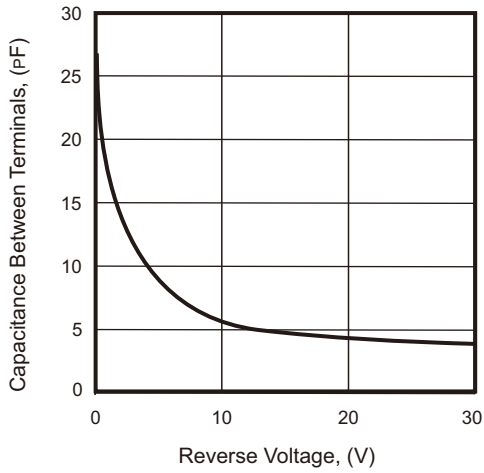
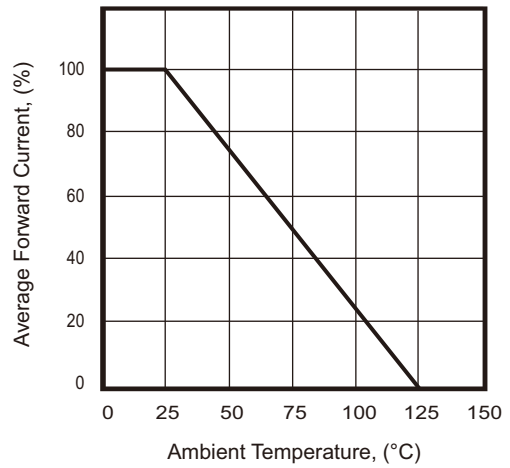
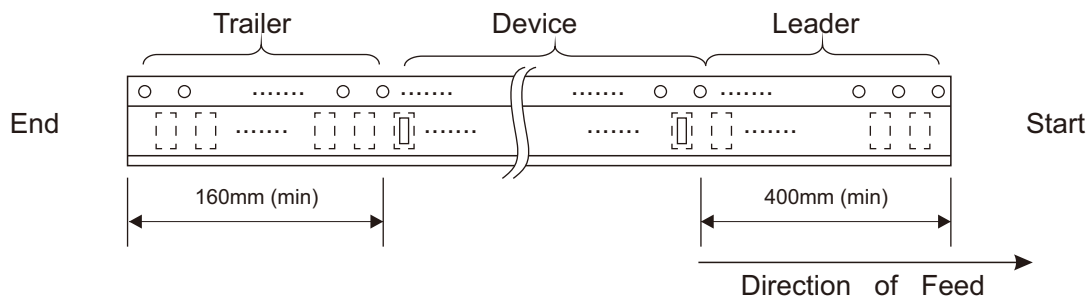
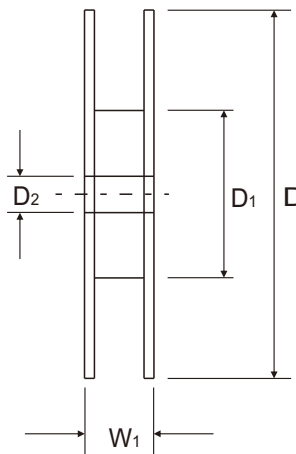
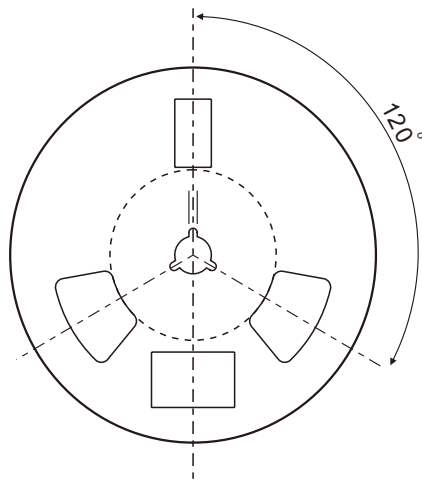
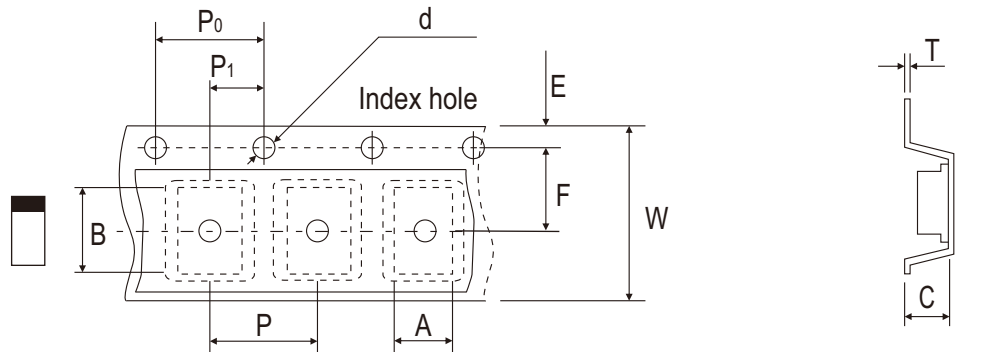


Fig.4 - Current Derating Curve



## Reel Taping Specification



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

| 0402C<br>(SOD-923F) | SYMBOL | E             | F             | P             | P0            | P1            | T                        | W             | W1                       |
|---------------------|--------|---------------|---------------|---------------|---------------|---------------|--------------------------|---------------|--------------------------|
|                     | (mm)   | 1.75 ± 0.10   | 3.50 ± 0.10   | 4.00 ± 0.10   | 4.00 ± 0.10   | 2.00 ± 0.10   | 0.20 + 0.02<br>- 0.05    | 8.00 ± 0.20   | 12.00 + 0.50<br>- 0.00   |
|                     | (inch) | 0.069 ± 0.004 | 0.138 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.008 + 0.001<br>- 0.002 | 0.315 ± 0.008 | 0.472 + 0.020<br>- 0.000 |

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

REV:A

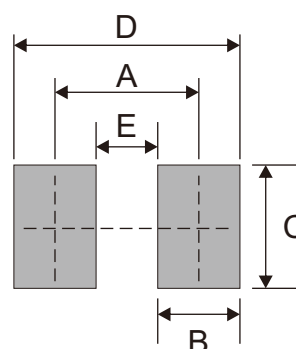
## Marking Code

| Part Number    | Marking Code |
|----------------|--------------|
| ACDBQC0130L-HF | BP           |



## Suggested PAD Layout

| SIZE | 0402C/SOD-923F |        |
|------|----------------|--------|
|      | (mm)           | (inch) |
| A    | 0.70           | 0.028  |
| B    | 0.40           | 0.016  |
| C    | 0.60           | 0.024  |
| D    | 1.10           | 0.043  |
| E    | 0.30           | 0.012  |



## Standard Packaging

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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

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

Other Similar products are found below :

[MA4E2039](#) [D1FH3-5063](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [RB551V-30](#) [BAS16E6433HTMA1](#) [BAT](#)  
[54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SK310-T](#) [SK32A-LTP](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-](#)  
[TL-E](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [SB007-03C-TB-E](#) [SK32A-TP](#)  
[SK33B-TP](#) [SK35A-TP](#) [SK38B-TP](#) [NRVBM120LT1G](#) [NTE505](#) [NTSB30U100CT-1G](#) [SS15E-TP](#) [VS-6CWQ10FNHM3](#) [ACDBA1100LR-HF](#)  
[ACDBA1200-HF](#) [ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [BAT6202VH6327XTSA1](#)  
[ACDBA340-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [SK310B-TP](#) [MA4E2502L-1246](#) [MA4E2502H-1246](#) [NRVBM120ET1G](#)  
[NSR01L30MXT5G](#) [NTE573](#)