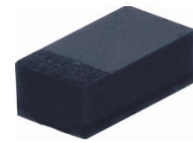


CDBQR00340-HF

$I_o = 30 \text{ mA}$
 $V_R = 40 \text{ Volts}$
 RoHS Device
 Halogen Free

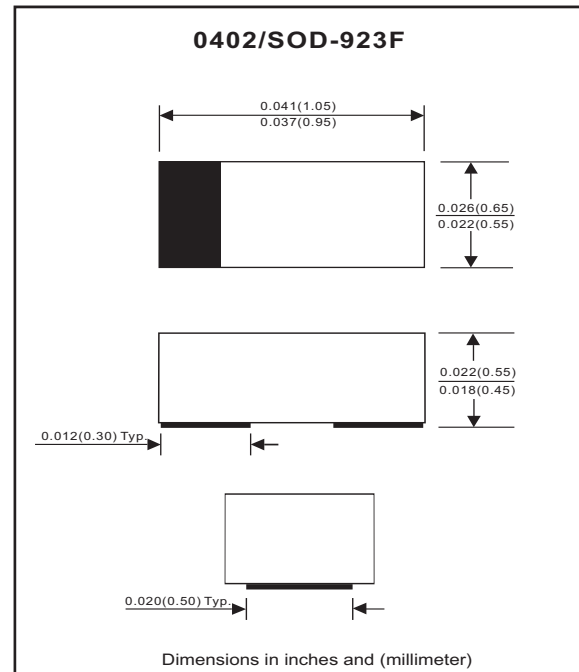


Features

- Designed for mounting on small surface.
- Extremely thin package.
- Low stored charge.
- Majority carrier conduction.

Mechanical data

- Case: 0402/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.001 gram(approx.).



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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|---------------------------------|--|------------------|-----|-----|------|------|
| Repetitive peak reverse voltage | | V _{RRM} | | | 45 | V |
| Reverse voltage | | V _R | | | 40 | V |
| Average forward current | | I _o | | | 30 | mA |
| Forward current,surge peak | 8.3 ms single half sine-wave superimposed on rate load(JEDEC method) | I _{FSM} | | 500 | | mA |
| Power Dissipation | | P _D | | | 200 | 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 = 1 mA DC | V _F | | | 0.37 | V |
| Reverse current | V _R = 30V V _R = 40V | I _R | | | 0.50 1.00 | uA |
| Capacitance between terminals | F = 1 MHz and 1 VDC reverse voltage | C _T | | 1.5 | | pF |

RATING AND CHARACTERISTIC CURVES (CDBQR00340-HF)

Fig. 1 - Forward characteristics

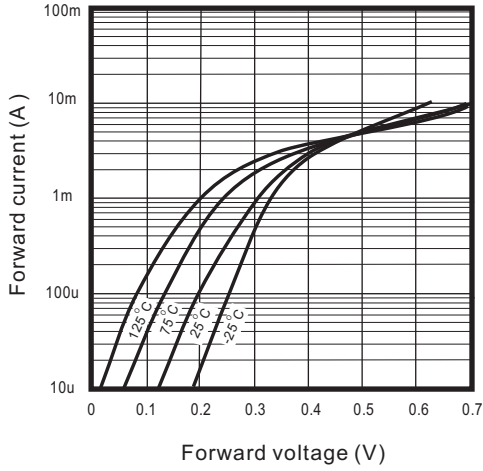


Fig. 2 - Reverse characteristics

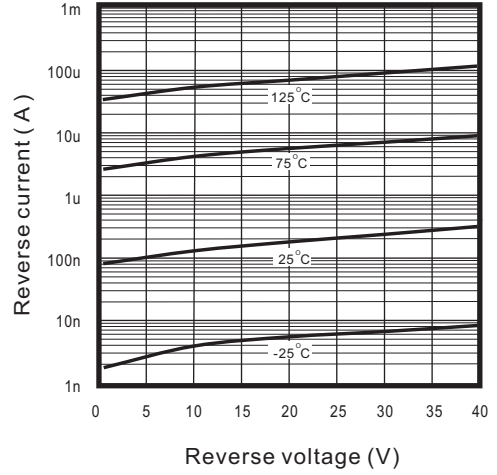


Fig.3 - Capacitance between terminals characteristics

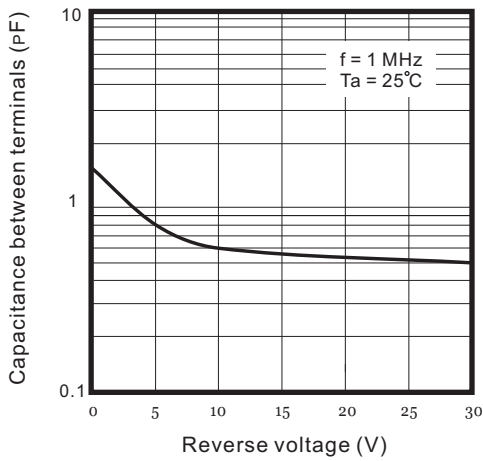
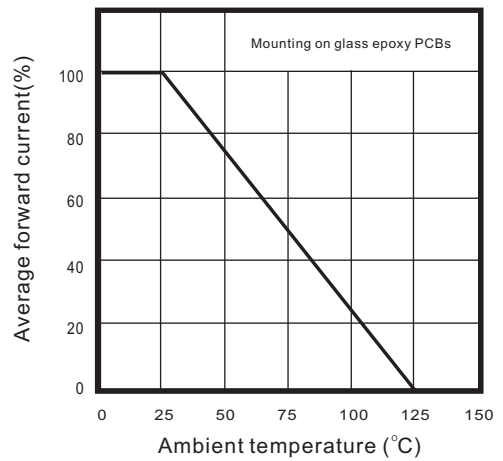
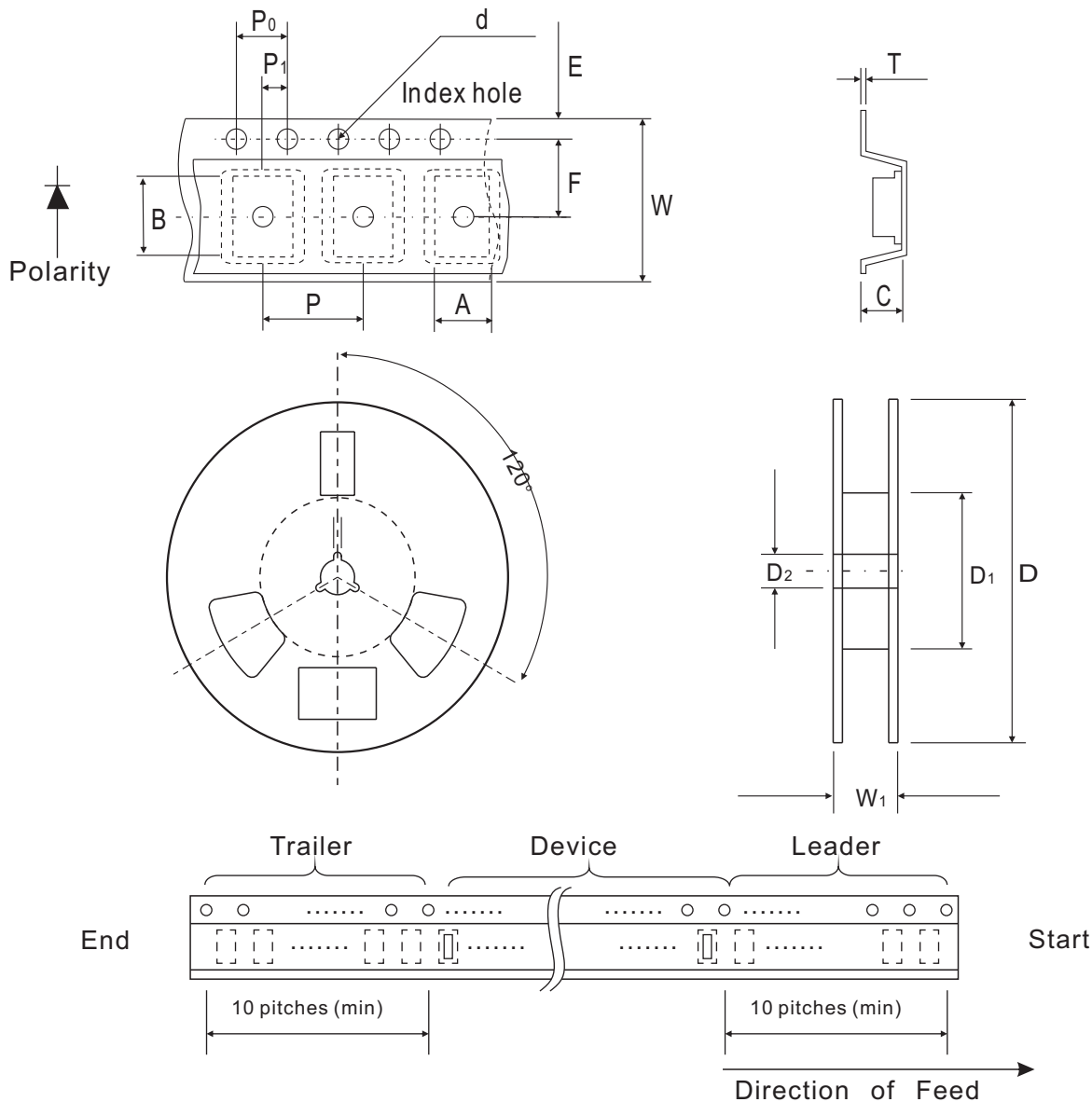


Fig.4 - Current derating curve



Reel Taping Specification



| 0402 (SOD-923F) | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|--------------------|--------|---------------|---------------|---------------|---------------|--------------|----------------|----------------|
| | (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 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 | 0.009 ± 0.002 | 0.315 ± 0.008 | 0.531 MAX. |

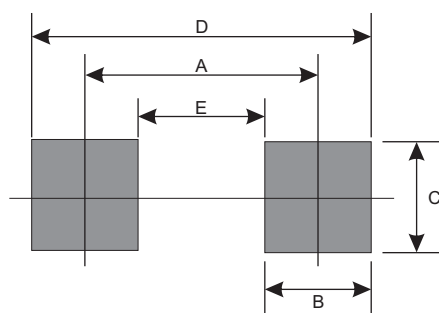
Marking Code

| Part Number | Marking Code |
|---------------|--------------|
| CDBQR00340-HF | B2 |



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 |