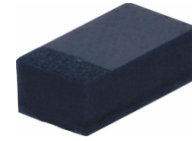


CDBUR0140L-HF

$I_o = 100 \text{ mA}$
 $V_R = 40 \text{ Volts}$
RoHS Device
Halogen Free



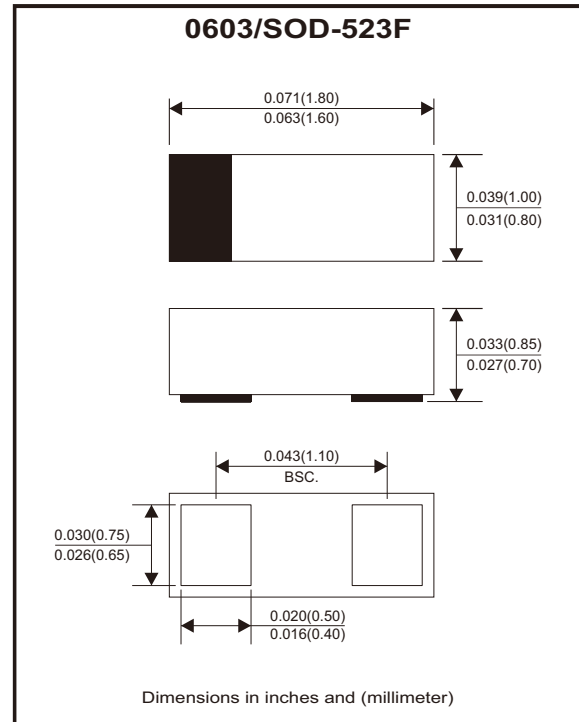
Features

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

Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any
- Weight: 0.003 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} | | | 45 | V |
| Reverse voltage | | V_R | | | 40 | V |
| Average forward rectified current | | I_o | | | 100 | mA |
| Forward current, surge peak | 8.3 ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | | | 1 | A |
| Storage temperature | | T_{STG} | -40 | | +125 | $^\circ\text{C}$ |
| Junction temperature | | T_j | | | +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 | $I_F = 100\text{mA}$ $I_F = 10\text{mA}$ | V_F | | | 0.55 0.34 | V |
| Reverse current | $V_R = 10\text{V}$ | I_R | | | 30 | μA |
| Capacitance between terminals | $f = 1 \text{ MHz}$, and 10 VDC reverse voltage | C_T | | 6 | | pF |

Rating and Characteristic Curves (CDBUR0140L-HF)

Fig.1 - Forward Characteristics

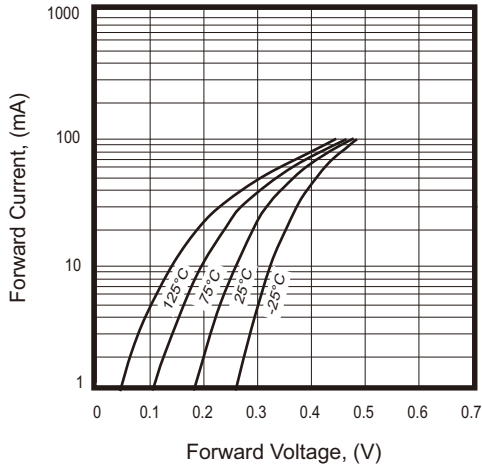


Fig.2 - Reverse Characteristics

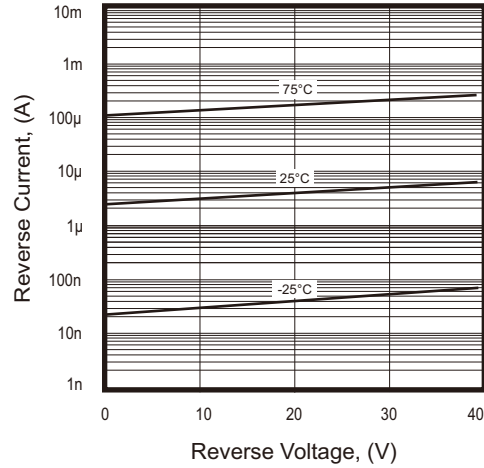


Fig.3 - Capacitance Between Terminals Characteristics

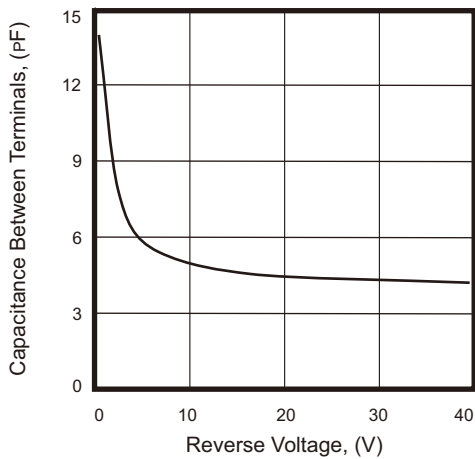
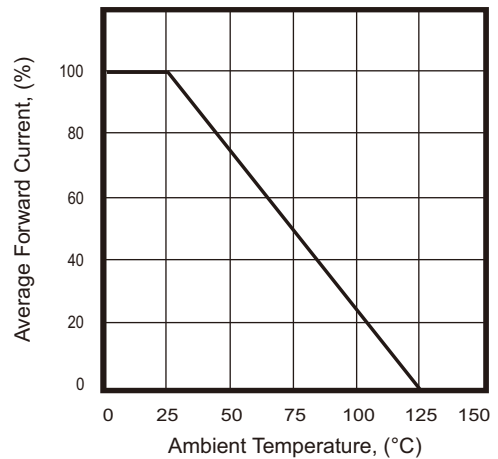
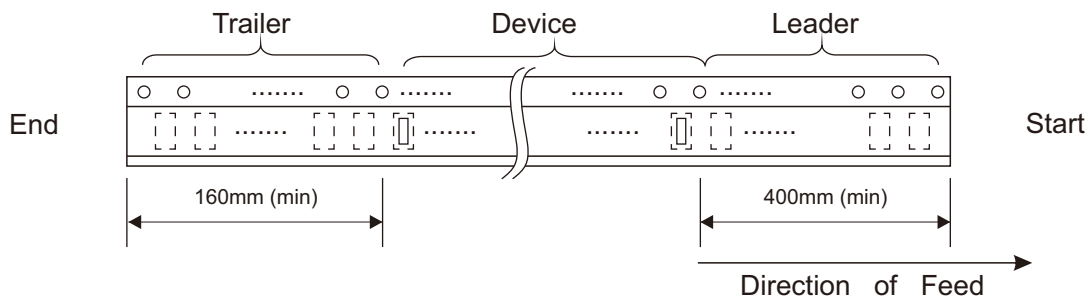
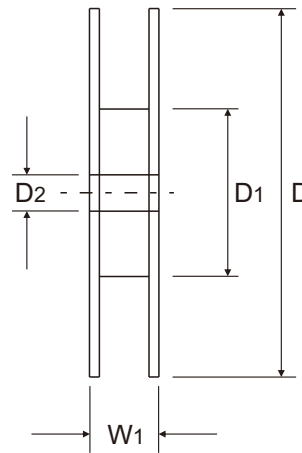
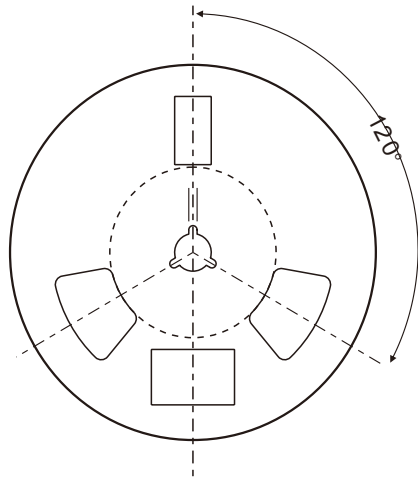
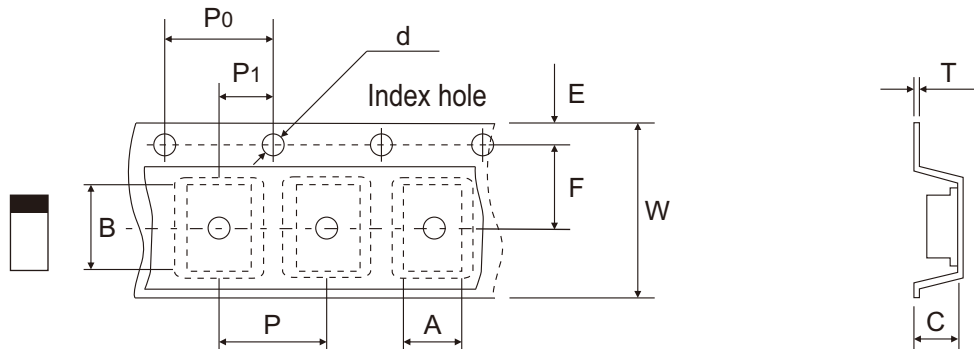


Fig.4 - Current Derating Curve



Reel Taping Specification



| 0603 (SOD-523F) | SYMBOL | A | B | C | d | D | D1 | D2 |
|--------------------|--------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|
| | (mm) | 1.16 ± 0.10 | 1.90 ± 0.10 | 0.95 ± 0.10 | 1.50 + 0.10 - 0.00 | 178.00 ± 1.00 | 60.00 ± 0.50 | 13.50 ± 0.20 |
| | (inch) | 0.046 ± 0.004 | 0.075 ± 0.004 | 0.037 ± 0.004 | 0.059 + 0.004 - 0.000 | 7.008 ± 0.039 | 2.362 ± 0.020 | 0.531 ± 0.008 |

| 0603 (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 ± 0.10 | 2.00 ± 0.05 | 0.22 ± 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 ± 0.004 | 0.079 ± 0.002 | 0.009 ± 0.001 | 0.315 ± 0.008 | 0.472 + 0.020 - 0.000 |

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

REV:B

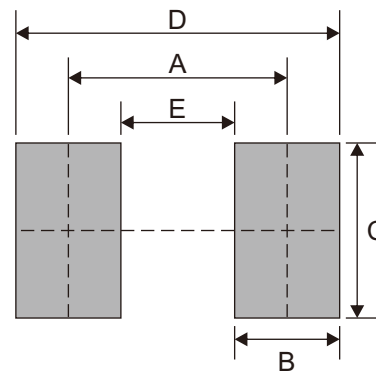
Marking Code

| Park Number | Marking Code |
|---------------|--------------|
| CDBUR0140L-HF | B8 |



Suggested P.C.B. PAD Layout

| SIZE | 0603/SOD-523F | |
|------|---------------|--------|
| | (mm) | (inch) |
| A | 1.25 | 0.049 |
| B | 0.60 | 0.024 |
| C | 1.00 | 0.039 |
| D | 1.85 | 0.073 |
| E | 0.65 | 0.026 |



Standard Packaging

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