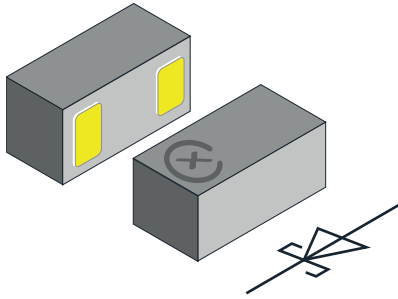


Small Signal Schottky Diode FlipKY[®] Gen 2



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:
0.6 mm x 0.3 mm x 0.29 mm
- 0.2 A forward current
- Low forward voltage drop (typ. 435 mV at 0.2 A)
- Low reverse current (< 3 μ A at 10 V)
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

DESIGN SUPPORT TOOLS AVAILABLE



| PARTS TABLE | | | | | | | |
|--------------|--------------------|-----------------------|--------------|--------------|----------|---|------------------------|
| PART | ORDERING CODE | CIRCUIT CONFIGURATION | PACKAGE NAME | TYPE MARKING | WEIGHT | TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL) | MINIMUM ORDER QUANTITY |
| VSKY02300603 | VSKY02300603-G4-08 | Single | CLP0603-2M | 23 | 0.115 mg | 15 000 | 15 000 |

| ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | |
|---|-----------------------|-----------|-------|------|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT |
| Reverse voltage | | V_R | 30 | V |
| Forward continuous current | | I_F | 200 | mA |
| Surge forward current | 8.3 ms half sine-wave | I_{FSM} | 6 | A |
| Power dissipation | Footprint acc. Fig. 4 | P_{tot} | 278 | mW |
| | Infinite heat sink | | 1712 | |

| THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | |
|--|---|------------|-------------|--------------------|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT |
| Thermal resistance junction to ambient air | Acc. JEDEC [®] 51-3 with footprint acc. Fig. 4 | R_{thJA} | 450 | K/W |
| Thermal resistance junction to soldering point | Infinite heat sink | R_{thJS} | 73 | |
| Maximum operating junction temperature | | T_j | 150 | $^{\circ}\text{C}$ |
| Storage temperature range | | T_{stg} | -65 to +150 | |

| ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified) | | | | | |
|---|---|--------|------|------|---------------|
| PARAMETER | TEST CONDITION | SYMBOL | TYP. | MAX. | UNIT |
| Leakage current | $V_R = 10\text{ V}$ | I_R | | 3 | μA |
| | $V_R = 30\text{ V}$ | I_R | | 10 | |
| Forward voltage | $I_F = 10\text{ mA}$ | V_F | 295 | 350 | mV |
| | $I_F = 100\text{ mA}$ | V_F | 385 | 460 | |
| | $I_F = 200\text{ mA}$ | V_F | 435 | 500 | |
| Diode capacitance | $V_R = 0\text{ V}$, $f = 1\text{ MHz}$ | C_D | 33 | | pF |

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

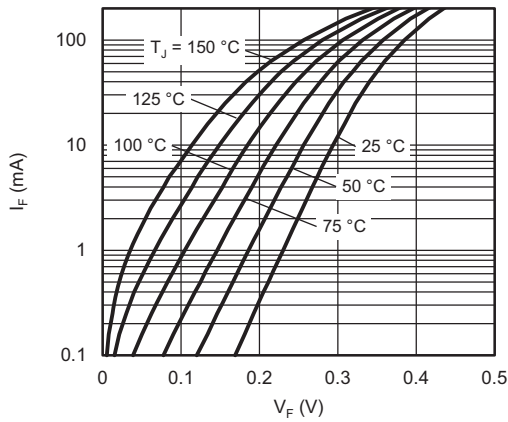


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

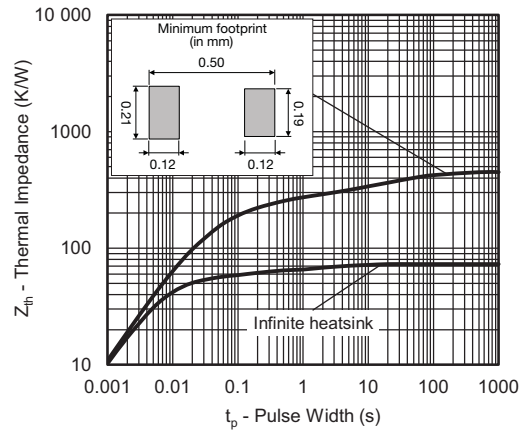


Fig. 4 - Typical Thermal Impedance vs. Time

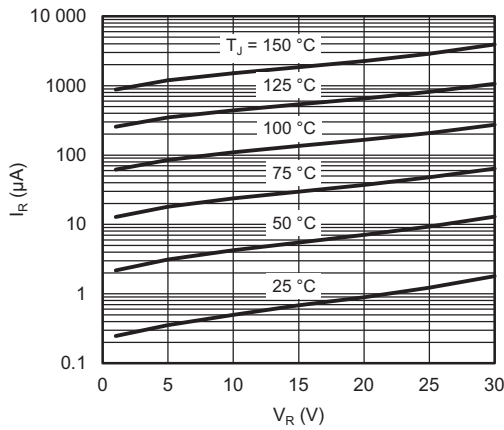


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

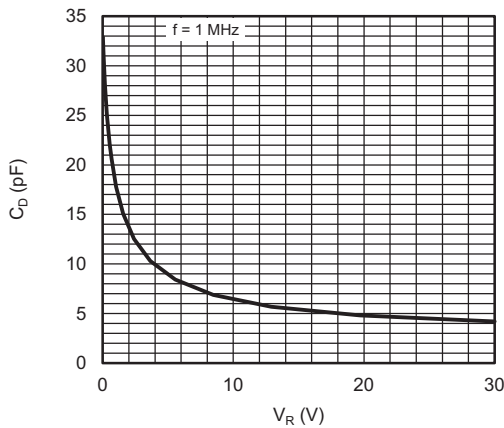
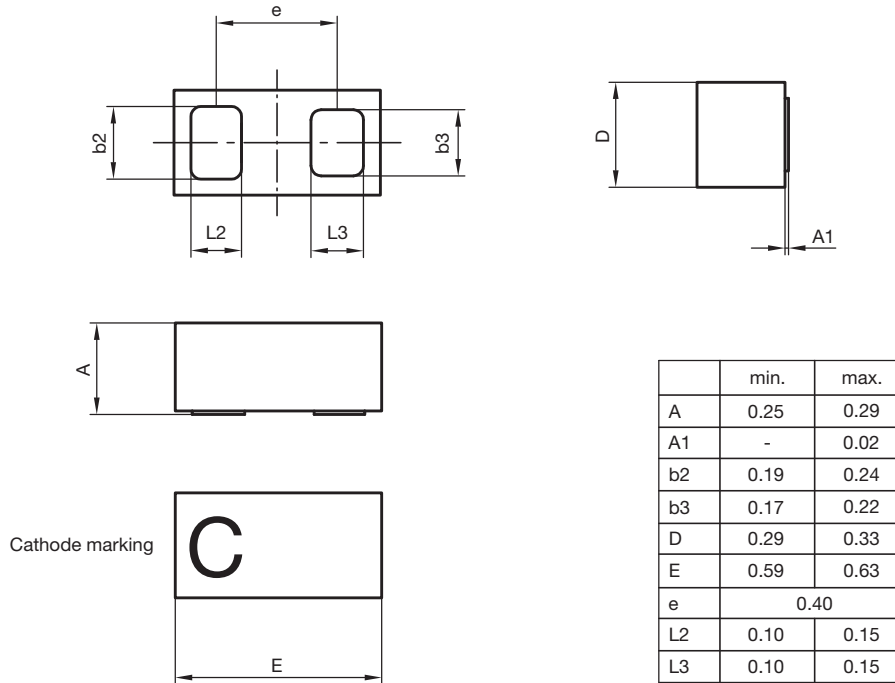


Fig. 3 - Typical Capacitance vs. Reverse Voltage

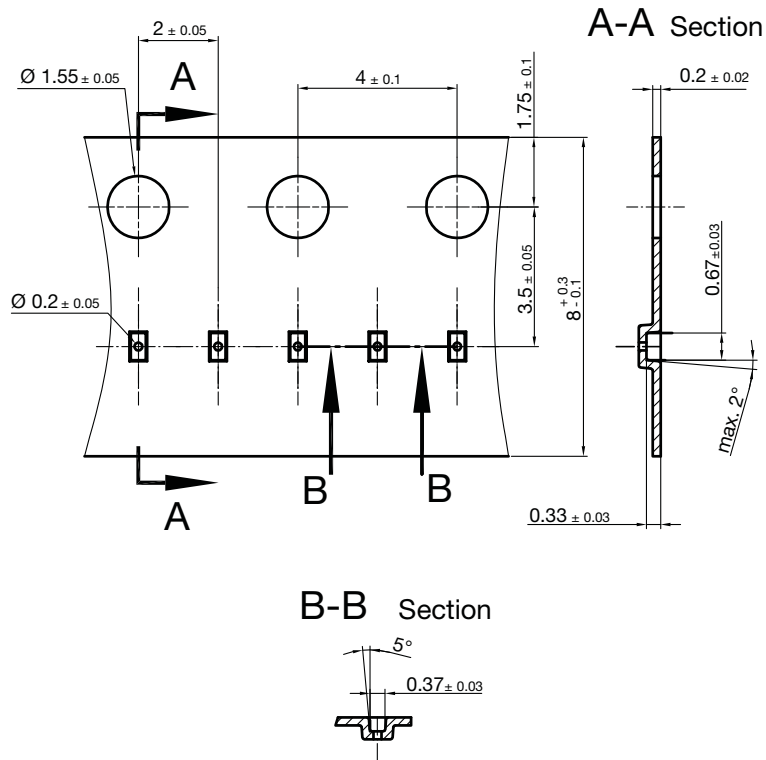
PACKAGE DIMENSIONS in millimeters: **CLP0603-2M**


Document no.: S8-V-3906.04-038 (4)
 Rev.3 - Date: 15. Feb. 2017
 22825

Footprint and soldering recommendation:

please see Application Note: www.vishay.com/doc?85917

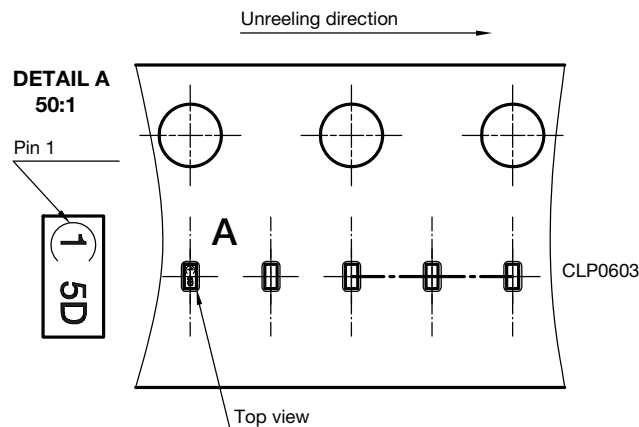
CARRIER TAPE in millimeters: **CLP0603**



Cummulative tolerances of 10 sprocket holes is $\pm 0.2\text{mm}$

22591
Document no. S8-V-3906.04-0025 (4)
Created - Date: 22. Nov. 2010

ORIENTATION IN CARRIER CLP0603



22936

Orientation in Carrier Tape (CLP0603)
S8-V-3906.04-026 (4)
22.10.2010



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