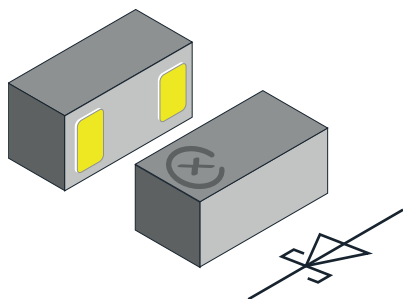


## Small Signal Schottky Diode FlipKY® Gen 2



### 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  $\mu$ A at 10 V)
- Material categorization:  
for definitions of compliance please see  
[www.vishay.com/doc?99912](http://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<br>(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 ( $T_{amb} = 25^{\circ}\text{C}$ , 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 ( $T_{amb} = 25^{\circ}\text{C}$ , 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 ( $T_{amb} = 25^{\circ}\text{C}$ , unless otherwise specified)

| PARAMETER         | TEST CONDITION                          | SYMBOL | TYP. | MAX. | UNIT          |
|-------------------|---|--------|------|------|---------------|
| Leakage current   | $V_R = 10\text{ V}$                     | $I_R$  |      | 3    | $\mu\text{A}$ |
|                   | $V_R = 30\text{ V}$                     | $I_R$  |      | 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            |

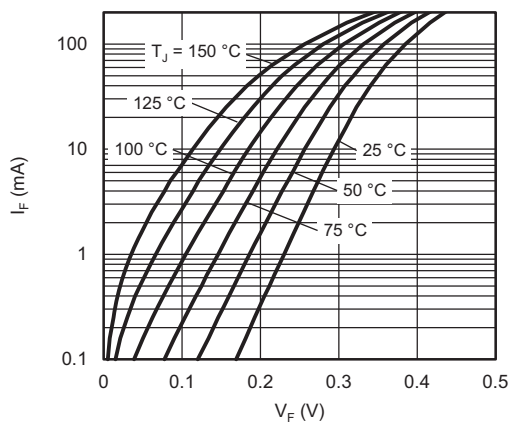
**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25\text{ }^{\circ}\text{C}$  unless otherwise noted)


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

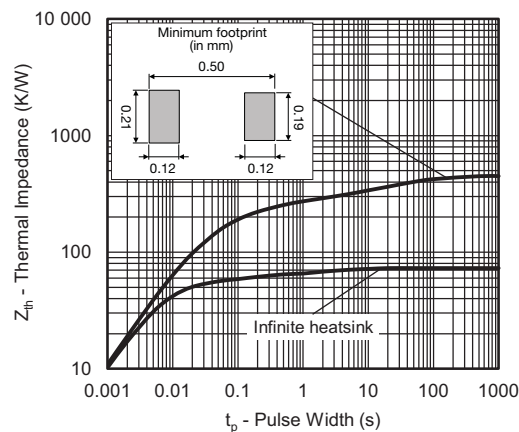


Fig. 4 - Typical Thermal Impedance vs. Time

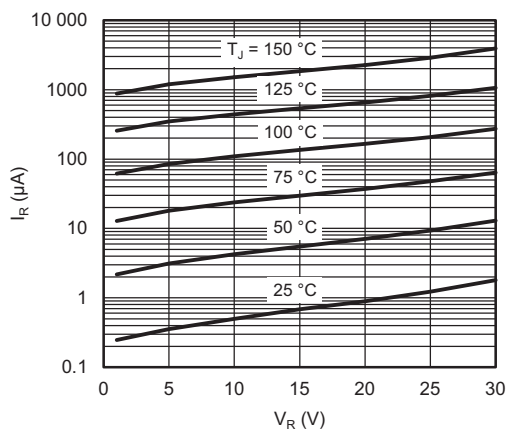


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

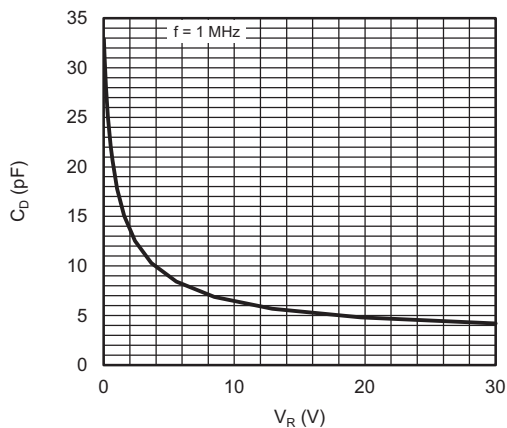
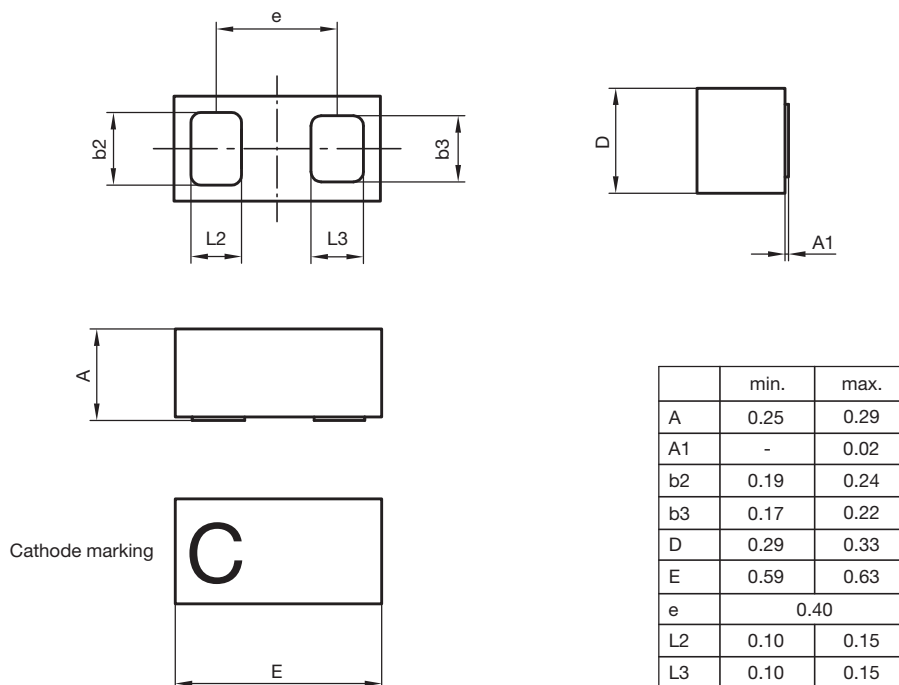


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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


Document no.: S8-V-3906.04-038 (4)

Rev.3 - Date: 15. Feb. 2017

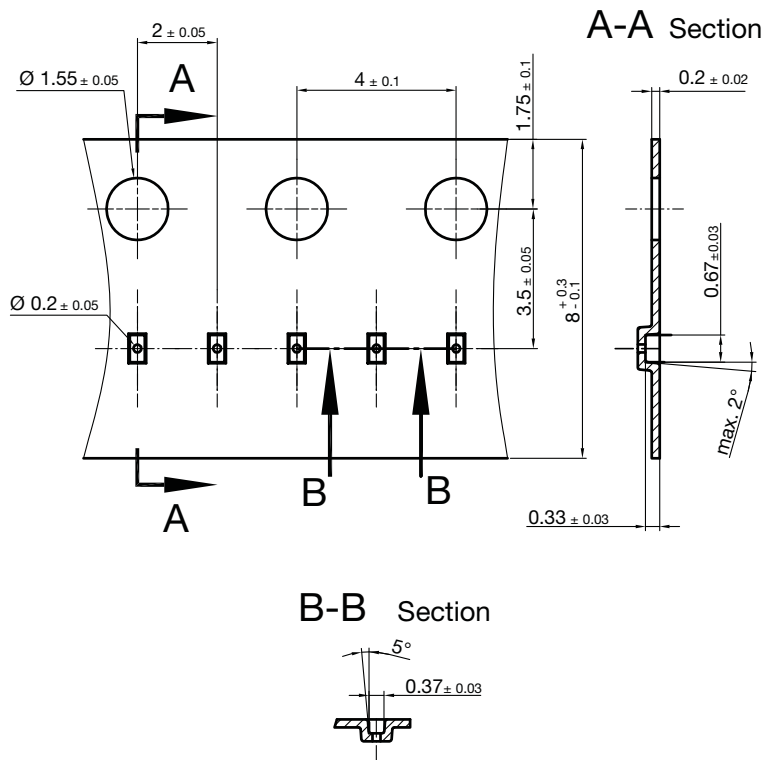
22825

**Footprint and soldering recommendation:**

please see Application Note: [www.vishay.com/doc?85917](http://www.vishay.com/doc?85917)



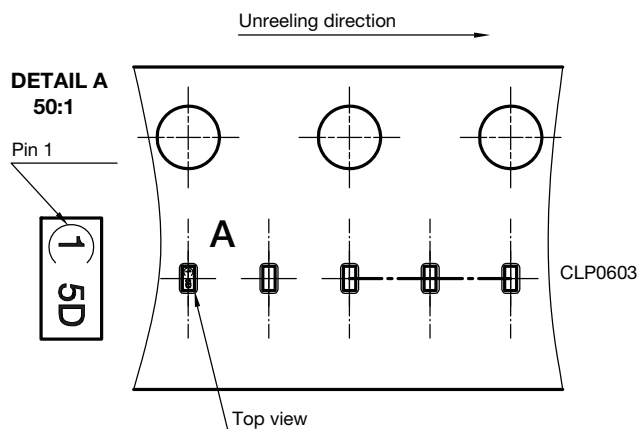
**CARRIER TAPE** in millimeters: **CLP0603**



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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