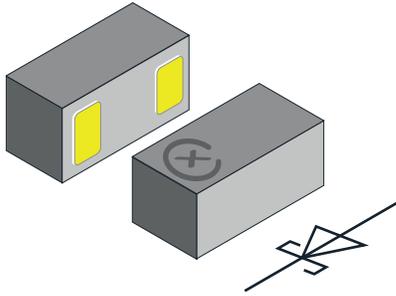


## Small Signal Schottky Diode FlipKY<sup>®</sup> Gen 2



### 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)
- Commercial grade
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



### MECHANICAL DATA

Case: CLP0603-2L VSKY

PARTS TABLE							
PART	ORDERING CODE	INTERNAL CONSTRUCTION	PACKAGE NAME	TYPE MARKING	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY02300603	VSKY02300603-G4-08	Single diode	CLP0603-2L VSKY	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 <sup>®</sup> 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	$\mu\text{A}$
	$V_R = 30\text{ V}$	$I_R$		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)

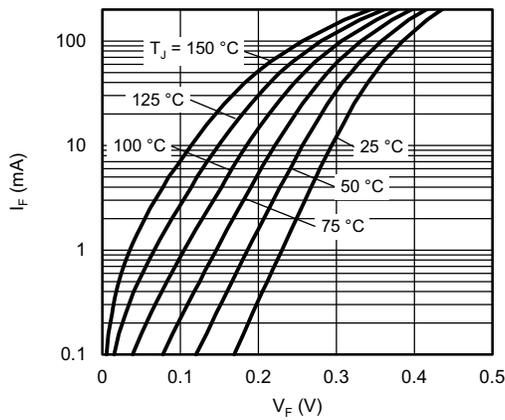


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

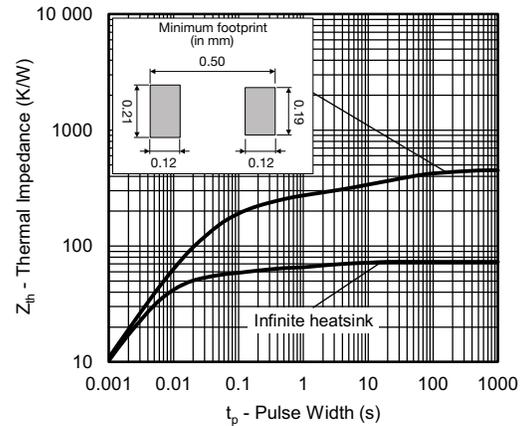


Fig. 4 - Typical Thermal Impedance vs. Time

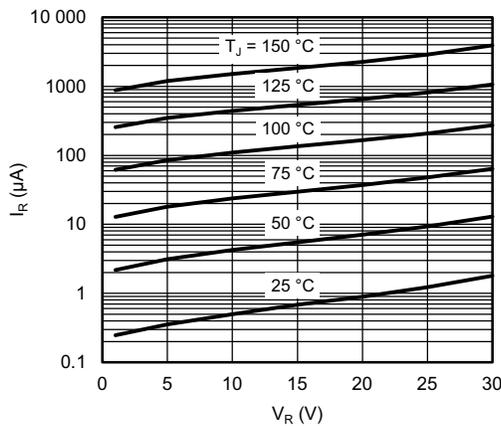


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

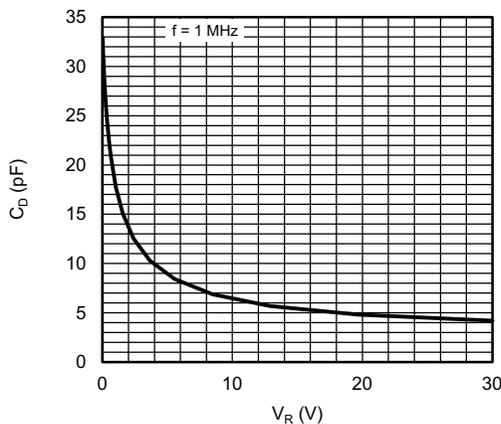
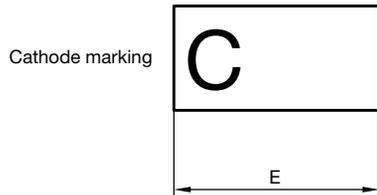
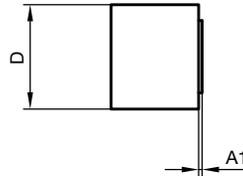
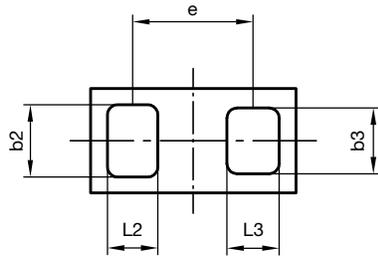


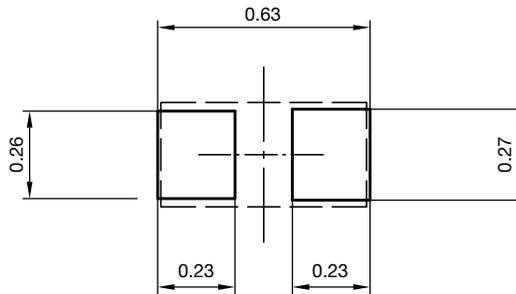
Fig. 3 - Typical Capacitance vs. Reverse Voltage

**PACKAGE DIMENSIONS** in millimeters: **CLP0603-2L VSKY**



	min.	max.
A	0.25	0.29
A1	-	0.02
b2	0.19	0.24
b3	0.17	0.22
D	0.29	0.33
E	0.59	0.63
e	0.40	
L2	0.10	0.15
L3	0.10	0.15

Foot print recommendation:

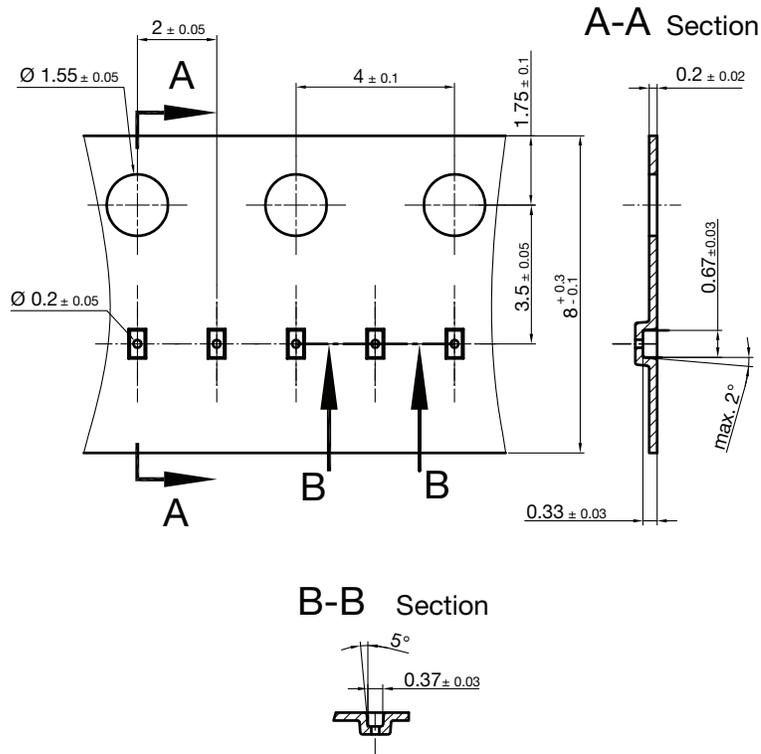


Document no.: S8-V-3906.04-038 (4)  
 Rev.1 - Date: 03. Nov. 2015  
 22825

**Footprint and soldering recommendation:**

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

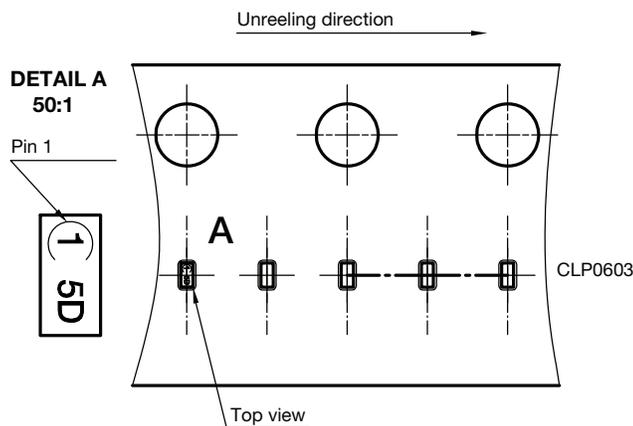
**CARRIER TAPE** in millimeters: **CLP0603**



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**



22607  
Orientation in Carrier Tape (CLP0603)  
S8-V-3906.04-026 (4)  
22.10.2010



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