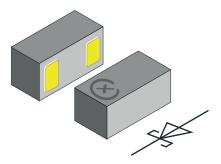
# VSKY02400603

**Vishay Semiconductors** 

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



www.vishay.com

### **DESIGN SUPPORT TOOLS AVAILABLE**



#### **MECHANICAL DATA**

Case: CLP0603-2M

### **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. 475 mV at 0.2 A)
- Low reverse current (< 3 µA at 10 V)</li>
- Material categorization:
- for definitions of compliance please see www.vishay.com/doc?99912





RoHS COMPLIANT HALOGEN

FREE **GREEN** (5-2008)

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
VSKY02400603	VSKY02400603-G4-08	Single	CLP0603-2M	24	0.115 mg	15 000	15 000

<b>ABSOLUTE MAXIMUM RATINGS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V <sub>R</sub>	40	V
Forward continuous current		١ <sub>F</sub>	200	mA
Surge forward current	8.3 ms half sine-wave	I <sub>FSM</sub>	6	A
Power dissipation	Footprint acc. Fig. 4	Р	278	mW
	Infinite heat sink	- P <sub>tot</sub>	1712	111VV

<b>THERMAL CHARACTERISTICS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Thermal resistance junction to ambient air	Acc. JEDEC <sup>®</sup> 51-3 footprint acc. Fig. 4	R <sub>thJA</sub>	450	K/W	
Thermal resistance junction to lead	Infinite heat sink	R <sub>thJL</sub>	73		
Maximum operating junction temperature		Tj	150	°C	
Storage temperature range		T <sub>stg</sub>	-65 to +150		

ELECTRICAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Leakage current	V <sub>R</sub> = 10 V	Ι <sub>R</sub>		3	μA
Leakage current	V <sub>R</sub> = 40 V	I <sub>R</sub>		10	μA
	I <sub>F</sub> = 10 mA	V <sub>F</sub>	295	360	mV
Forward voltage	I <sub>F</sub> = 100 mA	V <sub>F</sub>	400	490	mV
	I <sub>F</sub> = 200 mA	V <sub>F</sub>	475	540	mV
Diode capacitance	$V_R = 0 V$ , f = 1 MHz	CD	30		pF

Rev. 1.4, 27-Feb-2019

1

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## **Vishay Semiconductors**

### **RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25$ °C unless otherwise noted)

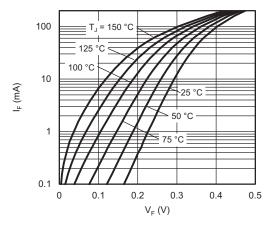


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

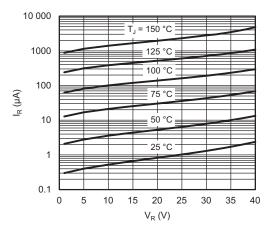


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

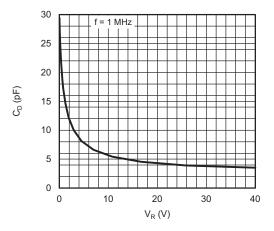


Fig. 3 - Typical Capacitance vs. Reverse Voltage

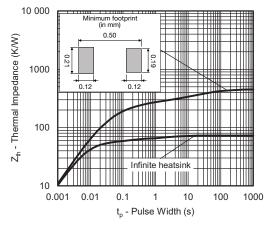


Fig. 4 - Typical Thermal Impedance

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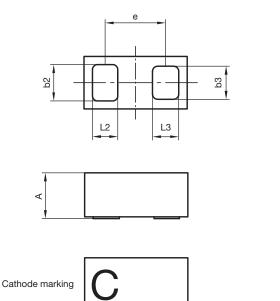
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### PACKAGE DIMENSIONS in millimeters: CLP0603-2M



Е

		min.	max.	
	А	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	
	е	0.40		
	L2	0.10	0.15	
	L3	0.10	0.15	

A1

Т

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

#### Footprint and soldering recommendation:

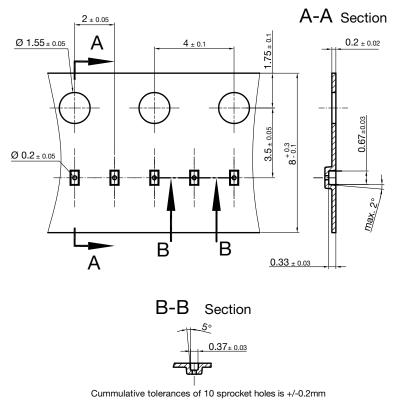
please see Application Note: www.vishay.com/doc?85917

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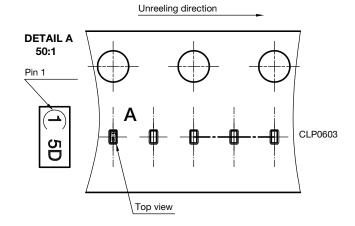
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#### CARRIER TAPE in millimeters: CLP0603



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

#### **ORIENTATION IN CARRIER CLP0603**



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

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