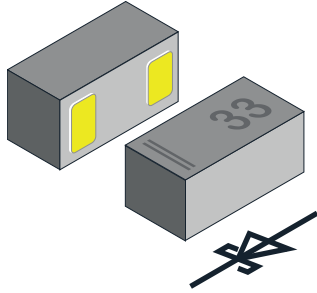


## Small Signal Schottky Diode FlipKY® Gen 3



### LINKS TO ADDITIONAL RESOURCES



### 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 200 mA)
- Low reverse current (< 3  $\mu$ A at 10 V)
- AEC-Q101 qualified
- 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)

### PARTS TABLE

PART	GRADE	ORDERING CODE	CIRCUIT CONFIGURATION	PACKAGE NAME	TYPE MARKING	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY023063	AEC-Q101	VSKY023063HG4-08	Single	CLP0603-2M	33	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	Single pulse; 8.3 ms half sine-wave	$I_{FSM}$	5	A

### THERMAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to soldering point	Acc. JEDEC® JESD51-14	$R_{thJS}$	24	K/W
Maximum operating junction temperature		$T_j$ max.	150	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	-65 to +150	$^{\circ}\text{C}$

### 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	$\mu\text{A}$
Leakage current	$V_R = 30\text{ V}$	$I_R$	-	10	$\mu\text{A}$
Forward voltage	$I_R = 10\text{ mA}$	$V_F$	295	360	mV
Forward voltage	$I_R = 100\text{ mA}$	$V_F$	385	440	mV
Forward voltage	$I_R = 200\text{ mA}$	$V_F$	435	520	mV
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)

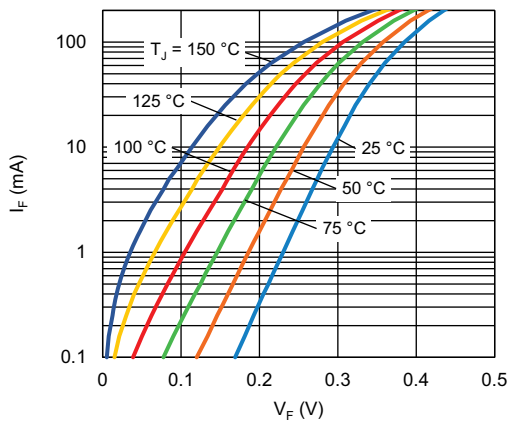


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

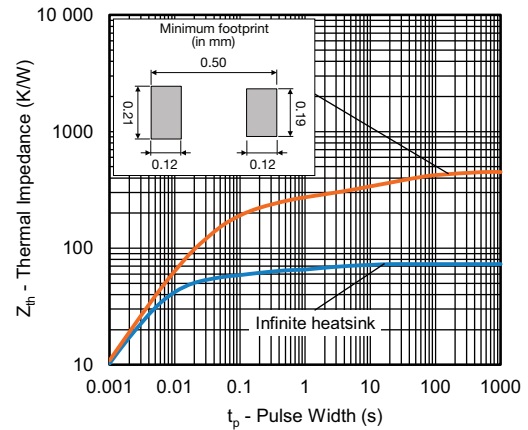


Fig. 4 - Typical Thermal Impedance vs. Time

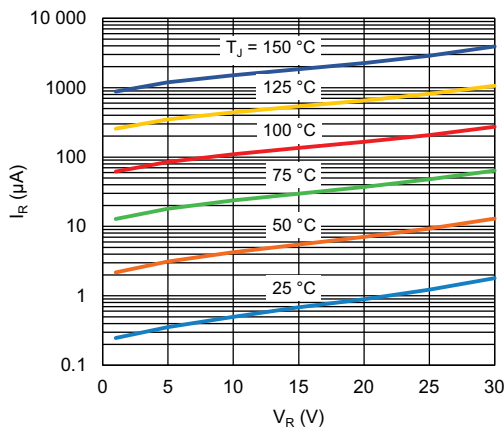


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

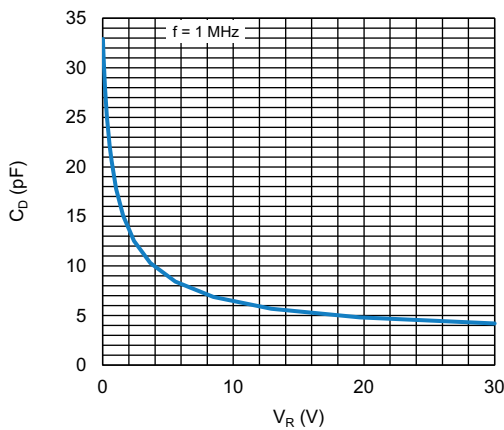
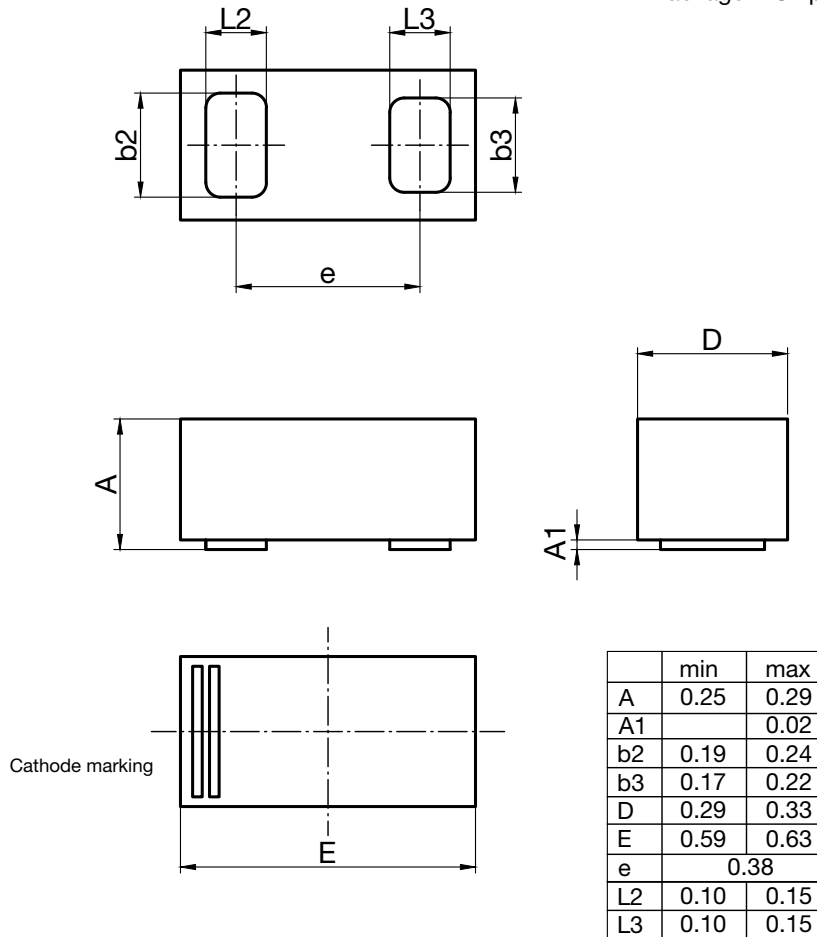


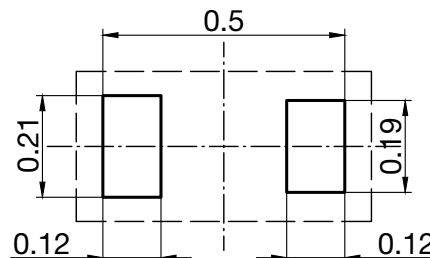
Fig. 3 - Typical Capacitance vs. Reverse Voltage

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

Package = Chip Dimensions in mm



foot print recommendation:



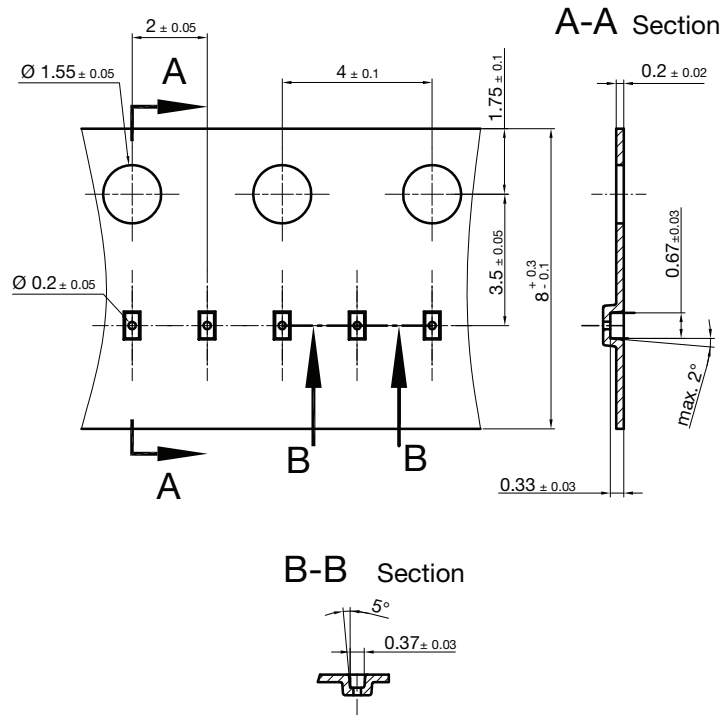
Created - Date: 01. April 2015  
 Rev.4 - Date: 19. Dec. 2023  
 Document no.:S8-V-3906.04-038 (4)  
 23234

**Footprint and soldering recommendation:**

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



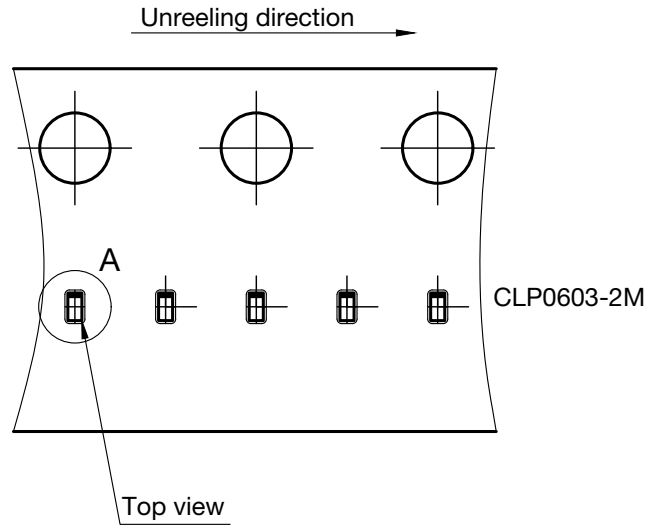
CARRIER TAPE in millimeters: **CLP0603-2M**



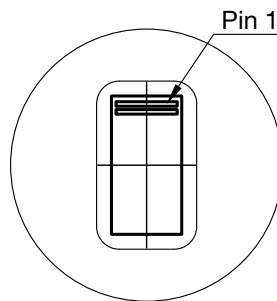
Cummulative tolerances of 10 sprocket holes is  $\pm 0.2$  mm

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

**ORIENTATION IN CARRIER CLP0603-2M**



DETAIL A  
50:1



Orientation in Carrier Tape CLP0603-2M  
S8-V-3906.04-070 (4)  
19.01.2024



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