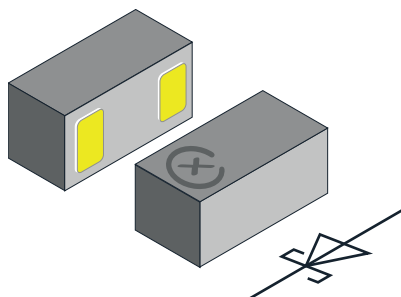


Small Signal Schottky Diode FlipKY® Gen 2



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)

MECHANICAL DATA

Case: CLP0603-2M

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	CLP0603-2M	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	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

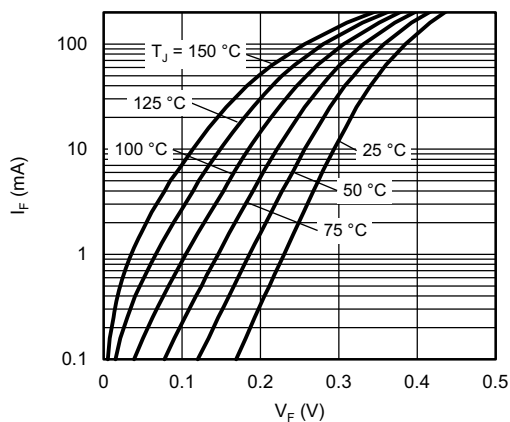
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)


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

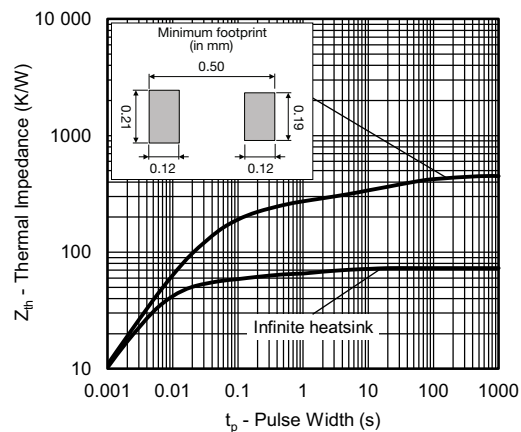


Fig. 4 - Typical Thermal Impedance vs. Time

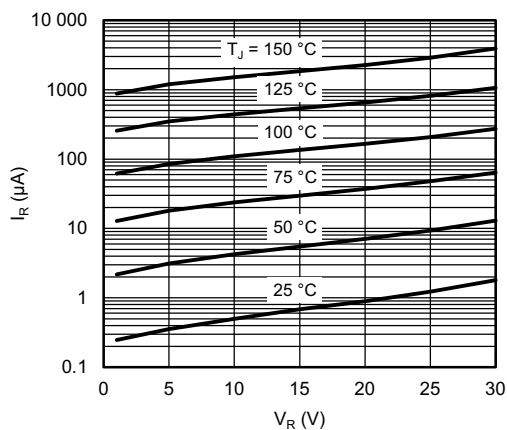


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

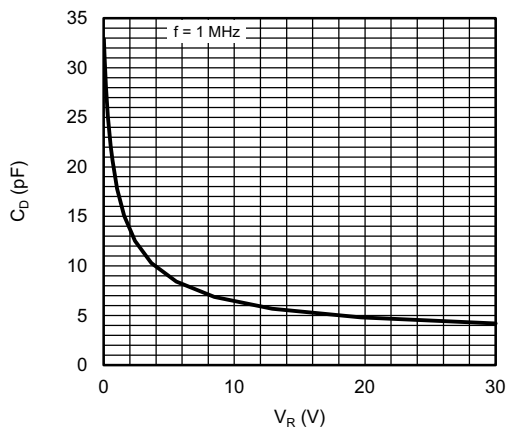
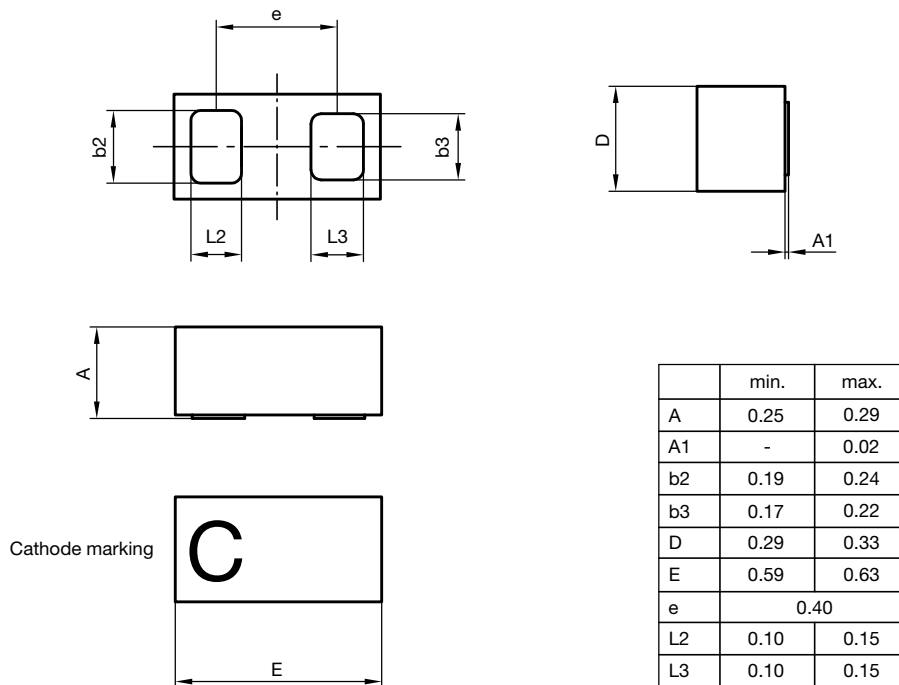


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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


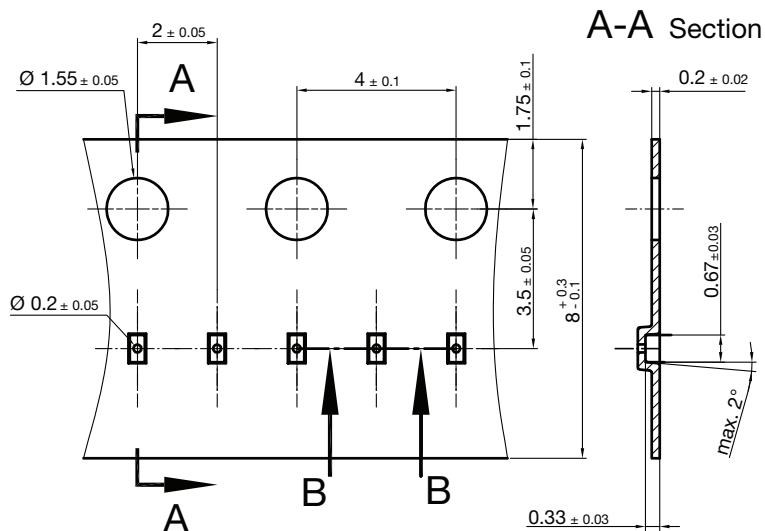
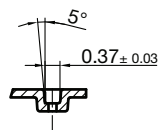
Document no.: S8-V-3906.04-038 (4)

Rev.3 - Date: 15. Feb. 2017

22825

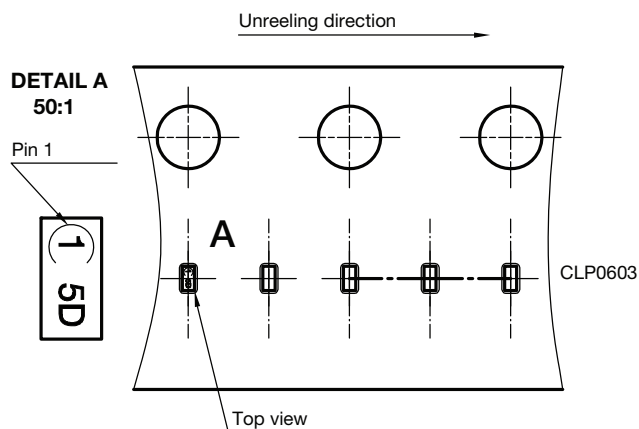
Footprint and soldering recommendation:

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

CARRIER TAPE in millimeters: **CLP0603**

B-B Section


Cummulative tolerances of 10 sprocket holes is +/-0.2mm

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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