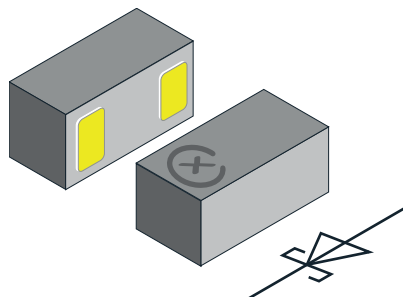




Small Signal Schottky Diode FlipKY® Gen 2



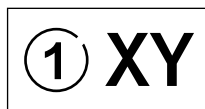
FEATURES

- 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)

MARKING (example only)



22545

1 = year code

Open circle = month code and pin 1

XY = type code

MECHANICAL DATA

Case: CLP0603-2M

LINKS TO ADDITIONAL RESOURCES



3D Models



Models



Related Documents



Footprints

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
VSKY02300603	VSKY02300603-G4-08	Single	CLP0603-2M	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	0.2	A
Surge forward current	Single pulse; 8.3 ms half sine-wave	I_{FSM}	6	A
Power dissipation	Minimal footprint	P_{tot}	278	mW
Power dissipation	Infinite heatsink	P_{tot}	1712	mW

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® 51-3 with minimal footprint	R_{thJA}	450	K/W
Thermal resistance junction to soldering point	Infinite heatsink	R_{thJS}	73	K/W
Maximum operating junction temperature		$T_{j\text{ max.}}$	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	μA
Leakage current	$V_R = 30\text{ V}$	I_R	-	10	μA
Forward voltage	$I_F = 0.01\text{ A}$	V_F	295	350	mV
Forward voltage	$I_F = 0.1\text{ A}$	V_F	385	460	mV
Forward voltage	$I_F = 0.2\text{ A}$	V_F	435	500	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)

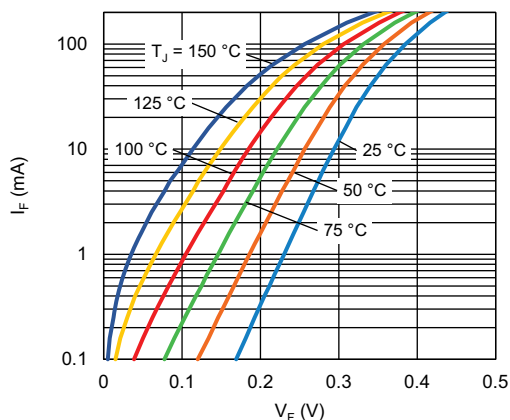


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

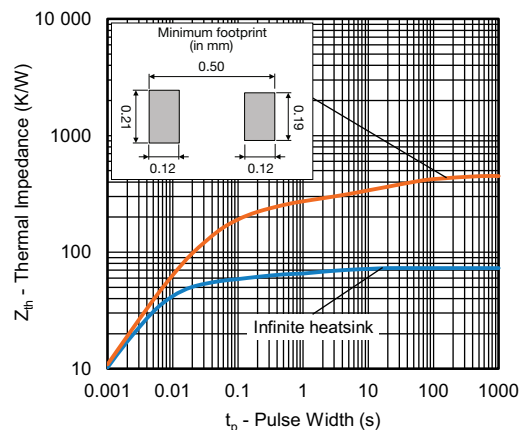


Fig. 4 - Typical Thermal Impedance vs. Time

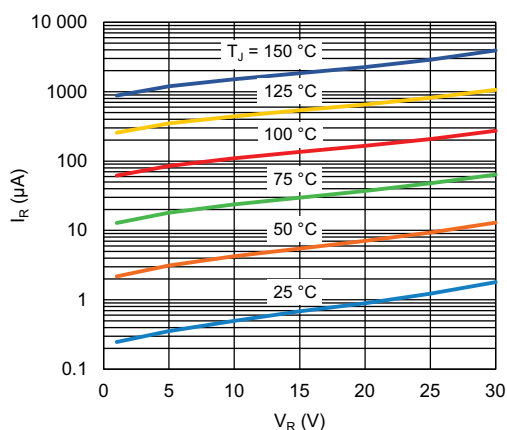


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

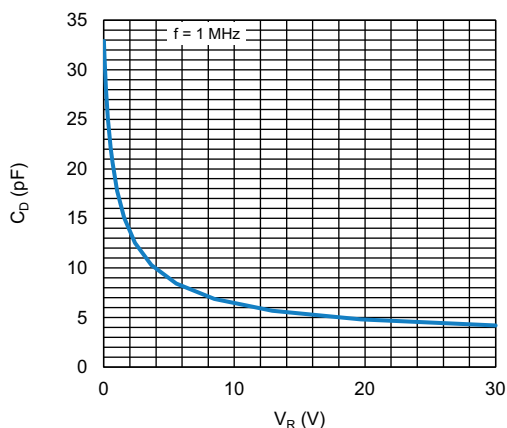
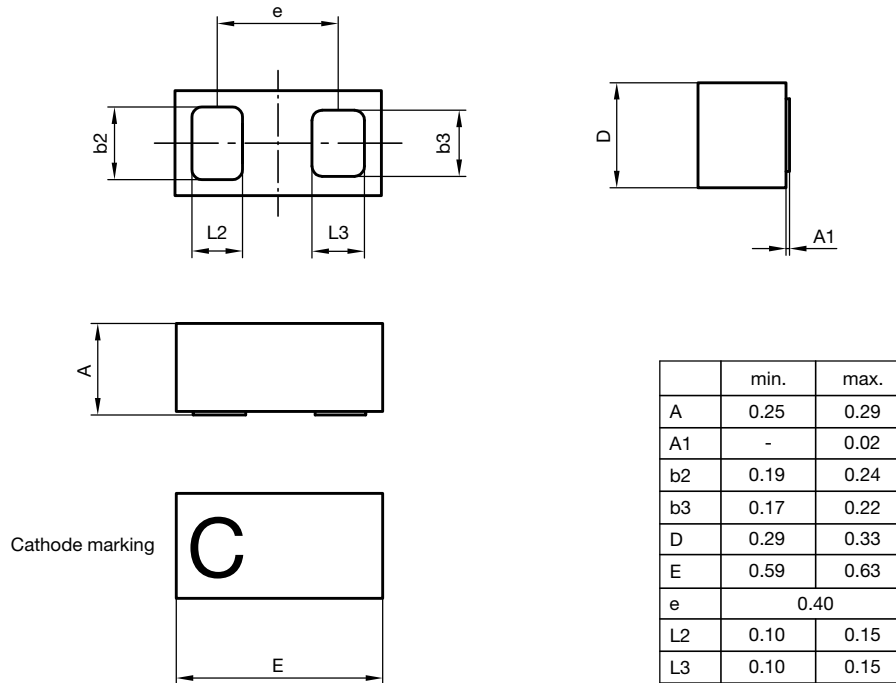


Fig. 3 - Typical Capacitance vs. Reverse Voltage



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



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

A-A Section

Technical drawing of a mechanical part showing the A-A section. The part is a rectangular block with a central slot and three circular holes. The dimensions are as follows:

- Top edge: 2 ± 0.05
- Left edge: $\varnothing 1.55 \pm 0.05$
- Right edge: 0.2 ± 0.02
- Bottom edge: 0.33 ± 0.03
- Central slot width: 4 ± 0.1
- Slot depth: 1.75 ± 0.1
- Slot bottom width: 3.5 ± 0.05
- Slot bottom depth: $8^{+0.3}_{-0.1}$
- Slot bottom radius: $\varnothing 0.2 \pm 0.05$
- Slot bottom angle: $\max. 2^\circ$

B-B Section

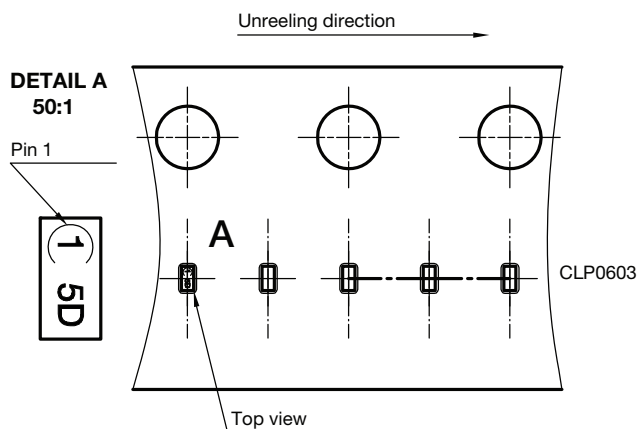
Technical drawing of the B-B section of the part. The dimensions are as follows:

- Top edge: 5°
- Bottom edge: 0.37 ± 0.03

Cummulative tolerances of 10 sprocket holes is ± 0.2 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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