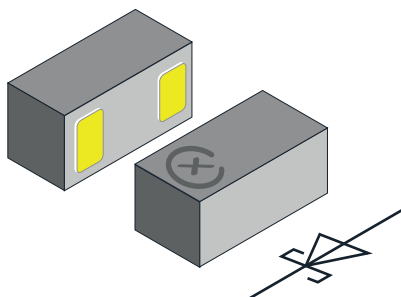
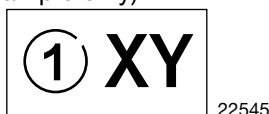


Small Signal Schottky Diode FlipKY® Gen 2



MARKING (example only)



1 = year code

Open circle = month code and pin 1

XY = type code

MECHANICAL DATA

Case: CLP0603-2M

LINKS TO ADDITIONAL RESOURCES



3D Models



SPICE Models



Related Documents



Footprints

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 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)

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

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	40	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 footprint acc. Fig. 4	R_{thJA}	450	K/W
Thermal resistance junction to lead	Infinite heat sink	R_{thJL}	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
	$V_R = 40\text{ V}$	I_R		10	μA
Forward voltage	$I_F = 10\text{ mA}$	V_F	295	360	mV
	$I_F = 100\text{ mA}$	V_F	400	490	mV
	$I_F = 200\text{ mA}$	V_F	475	540	mV
Diode capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	C_D	30		pF

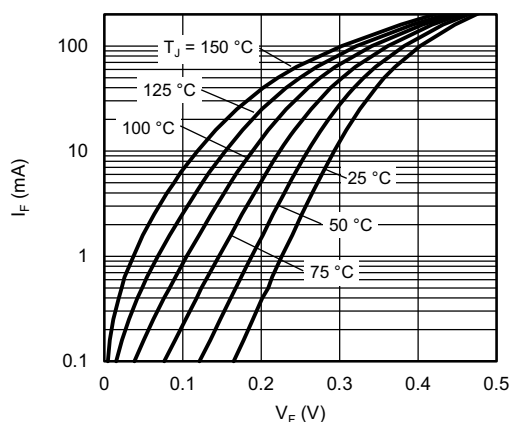
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)


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

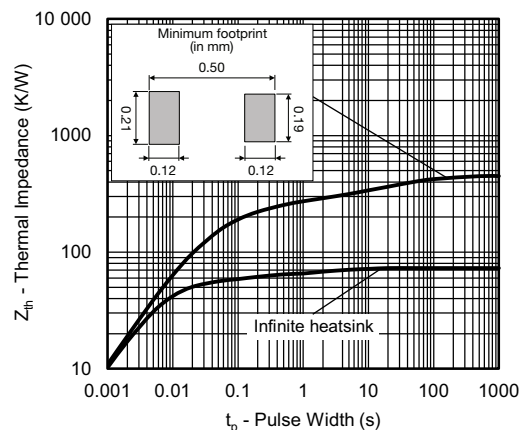


Fig. 4 - Typical Thermal Impedance

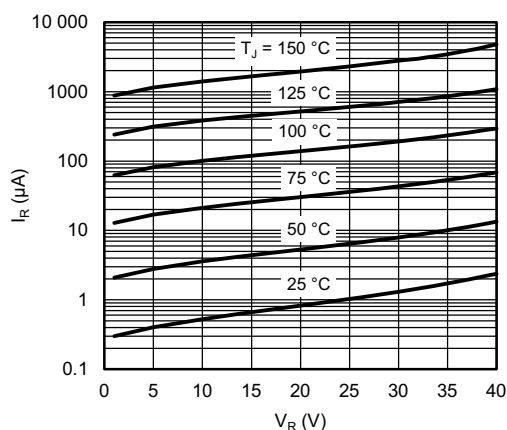


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

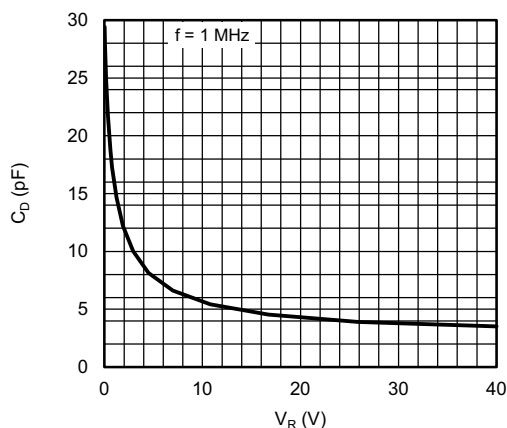
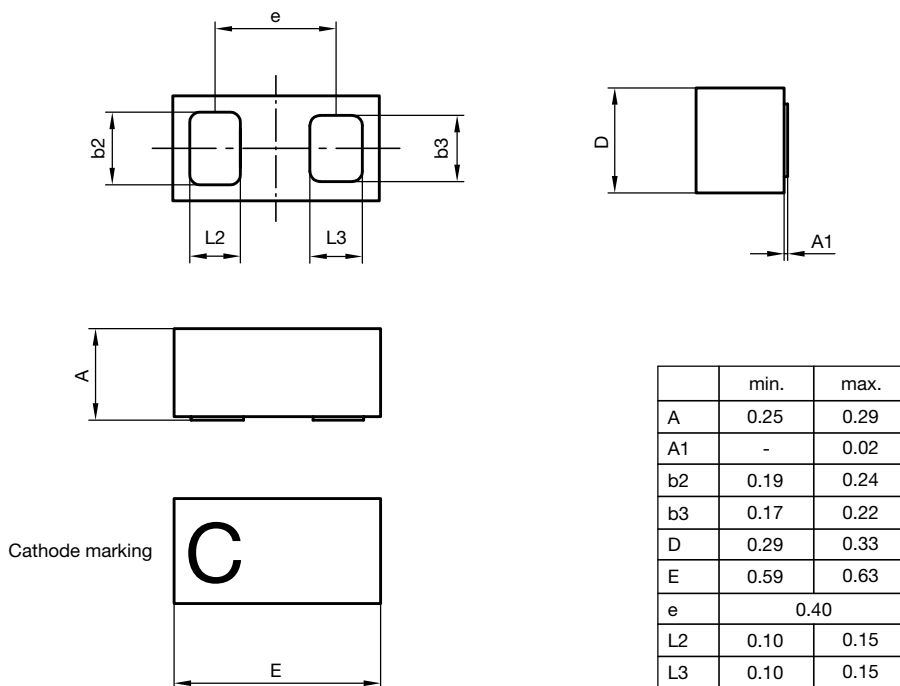


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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


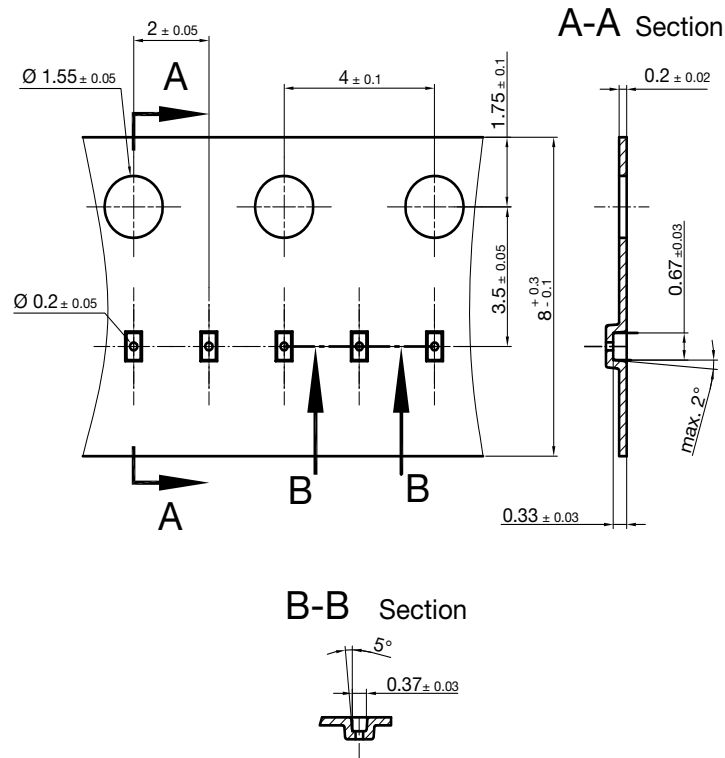
Document no.: S8-V-3906.04-038 (4)

Rev.3 - Date: 15. Feb. 2017

22825

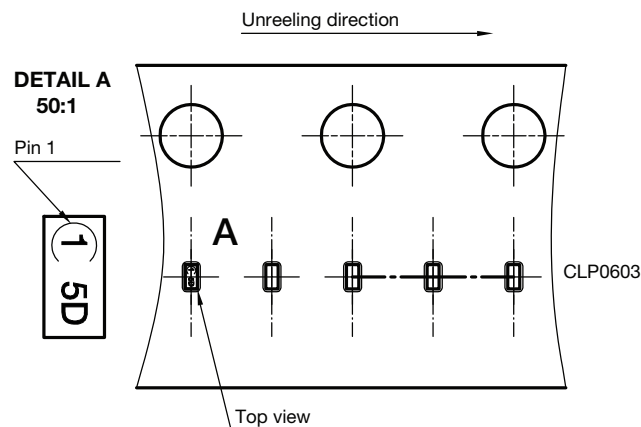
Footprint and soldering recommendation:

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

CARRIER TAPE in millimeters: **CLP0603**


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


Orientation in Carrier Tape (CLP0603)
S8-V-3906.04-026 (4)
22.10.2010
22936



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