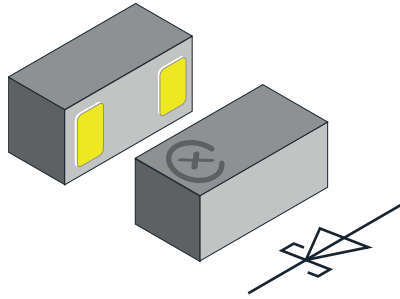


Small Signal Schottky Diode FlipKY[®] Gen 2



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)

DESIGN SUPPORT TOOLS AVAILABLE



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	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 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, 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 ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Leakage current	$V_R = 10\text{ V}$	I_R		3	μA
	$V_R = 30\text{ V}$	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)

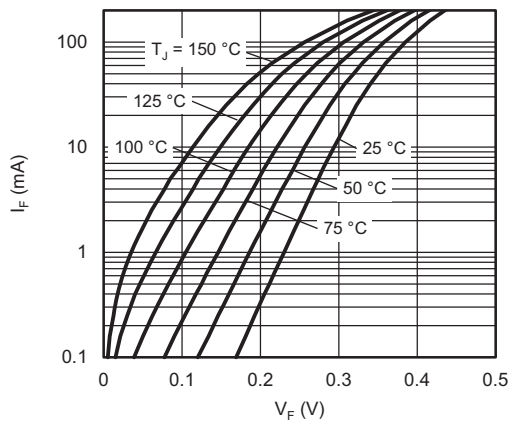


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

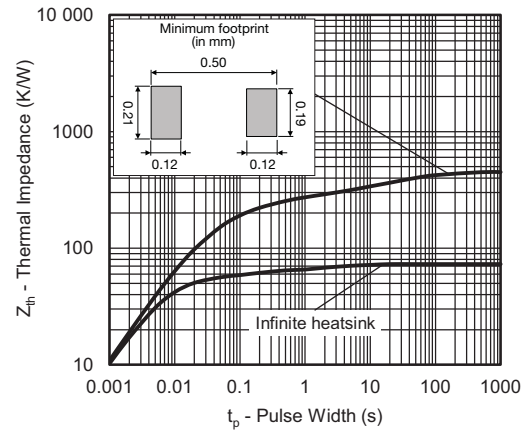


Fig. 4 - Typical Thermal Impedance vs. Time

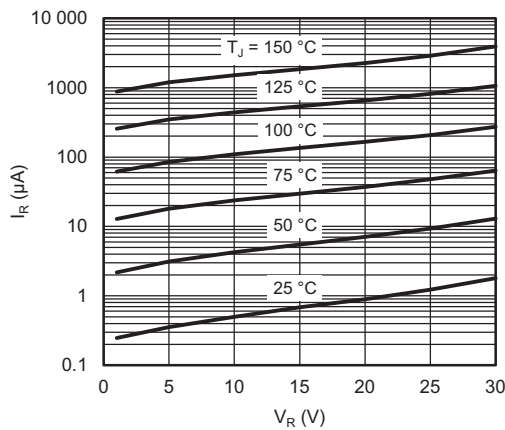


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

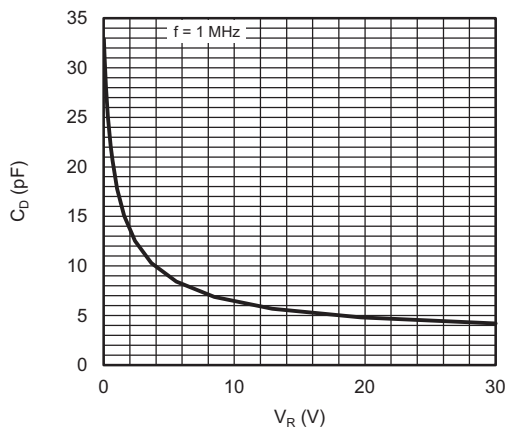
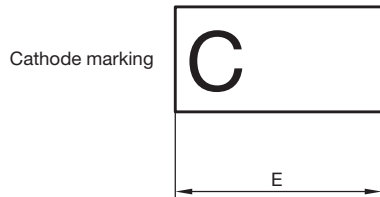
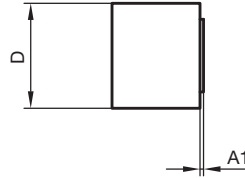
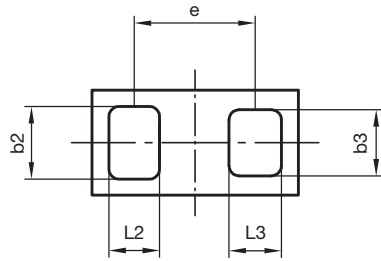


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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



	min.	max.
A	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
e	0.40	
L2	0.10	0.15
L3	0.10	0.15

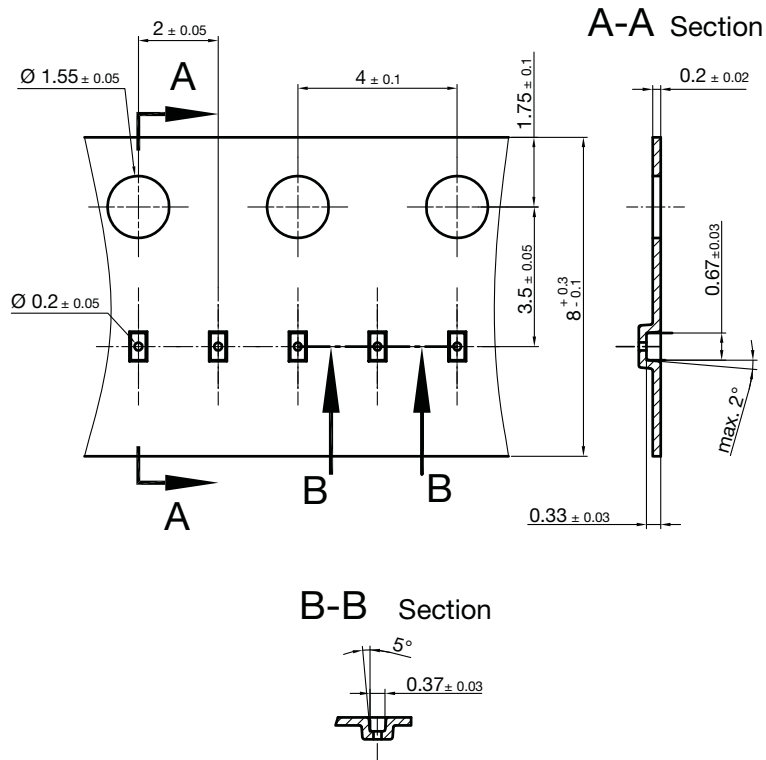
Document no.: S8-V-3906.04-038 (4)
 Rev.3 - Date: 15. Feb. 2017
 22825

Footprint and soldering recommendation:

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



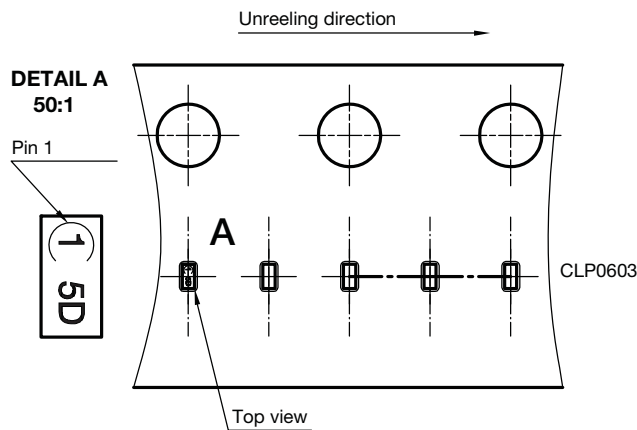
CARRIER TAPE in millimeters: CLP0603



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

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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