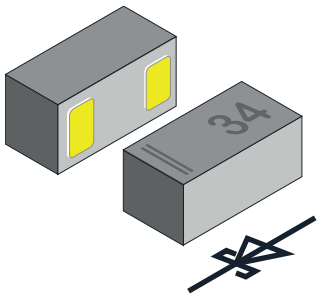
Small Signal Schottky Diode FlipKY® Gen 3



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 200 mA)
- Low reverse current (< 3 µA at 10 V)
- AEC-Q101 qualified
- Material categorization:
  for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

e4

RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

LINKS TO ADDITIONAL RESOURCES

3D Models | SPICE Models | Footprints

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
VSKY024063	AEC-Q101	VSKY024063HG4-08	Single	CLP0603-2M	34	0.115 mg	15 000	15 000

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °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	Single pulse; 8.3 ms half sine-wave	I_{FSM}	6	A

THERMAL CHARACTERISTICS (T_{amb} = 25 °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	°C
Storage temperature range		T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Leakage current	V_R = 10 V	I_R	-	3	µA
Leakage current	V_R = 40 V	I_R	-	10	µA
Forward voltage	I_R = 10 mA	V_F	295	360	mV
Forward voltage	I_R = 100 mA	V_F	400	460	mV
Forward voltage	I_R = 200 mA	V_F	475	540	mV
Diode capacitance	V_R = 0 V, f = 1 MHz	C_D	30	-	pF

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

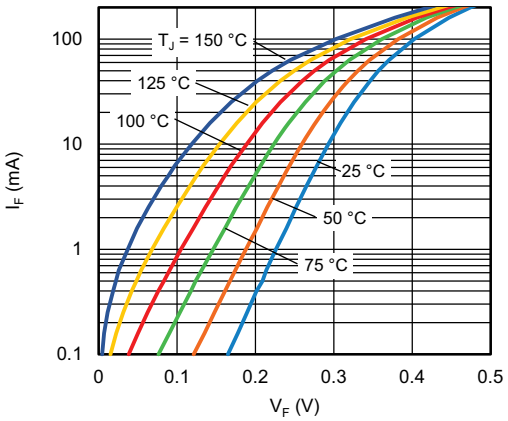


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

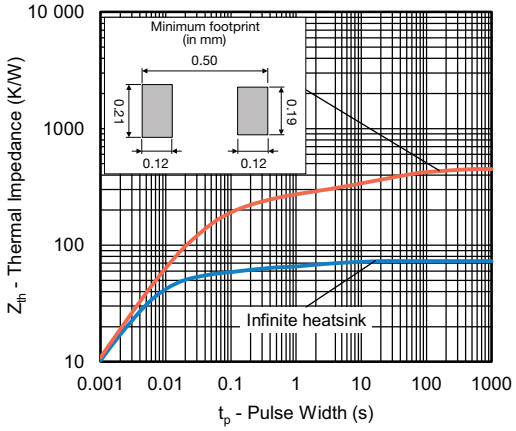


Fig. 4 - Typical Thermal Impedance

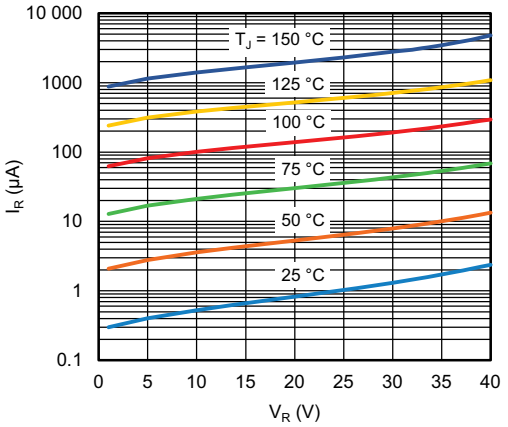


Fig. 2 - Typical Reverse Leakage Current vs. Reverse Voltage at Various Temperatures

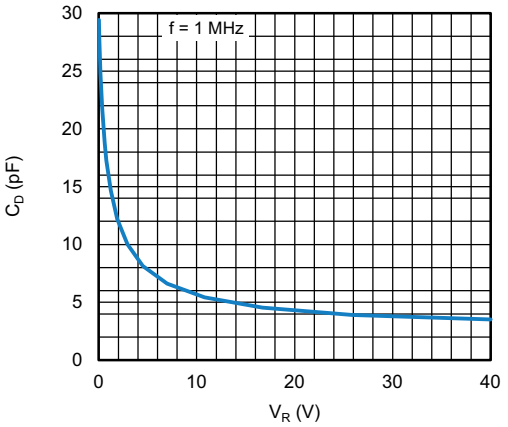
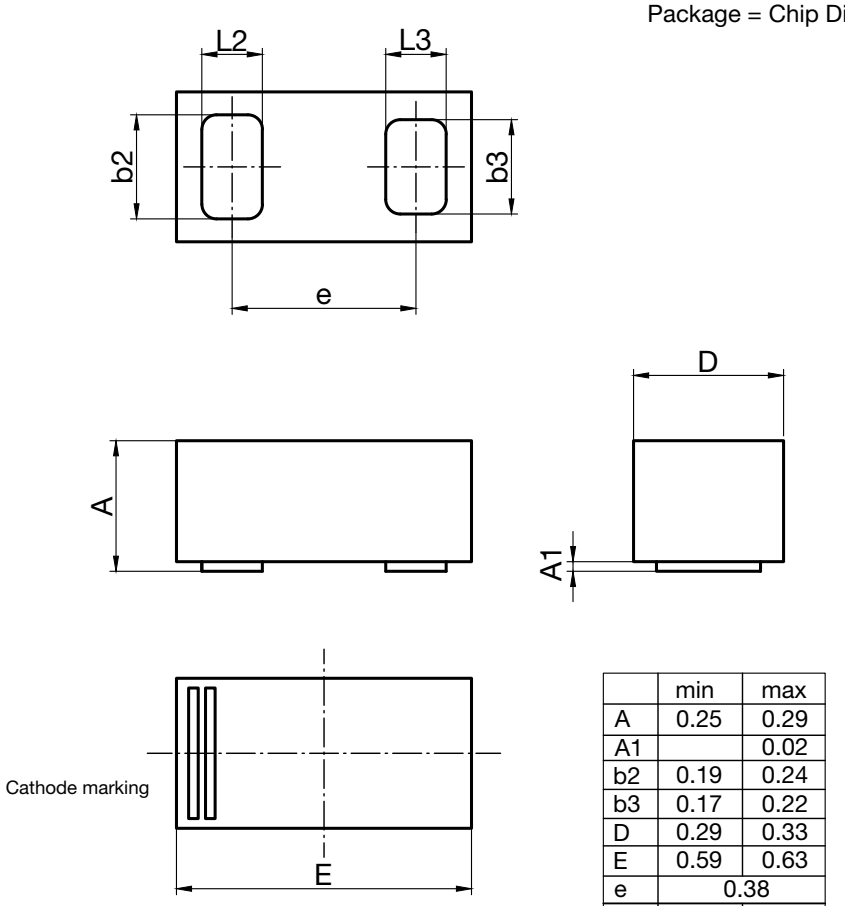


Fig. 3 - Typical Capacitance vs. Reverse Voltage

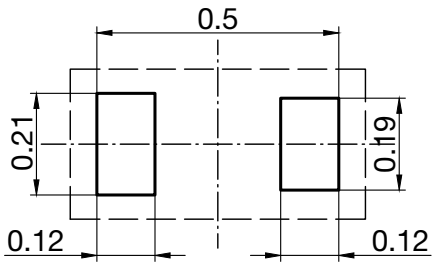
PACKAGE DIMENSIONS in millimeters: **CLP0603-2M**

Package = Chip Dimensions in mm



	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	0.38	
L2	0.10	0.15
L3	0.10	0.15

foot print recommendation:



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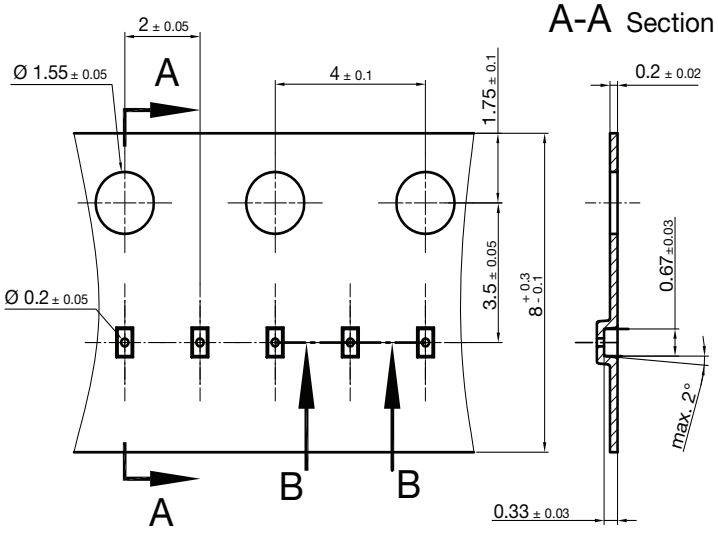
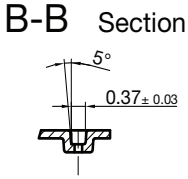
Document no.:S8-V-3906.04-038 (4)
23234

Footprint and soldering recommendation:
please see Application Note: www.vishay.com/doc?85917

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

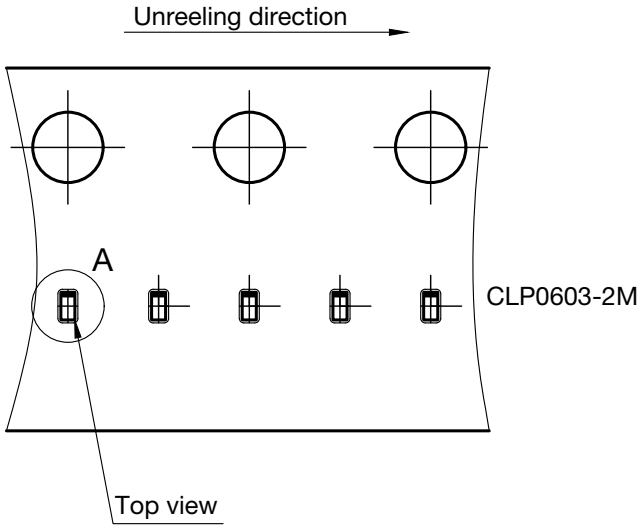




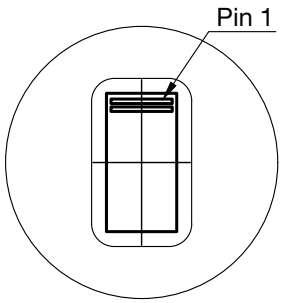
Cummulative tolerances of 10 sprocket holes is +/-0.2 mm

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

ORIENTATION IN CARRIER CLP0603-2M



DETAIL A
50:1



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

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