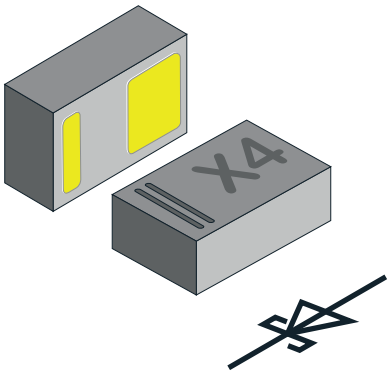
Small Signal Schottky Diode FlipKY® Gen 3



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:
  0.8 mm x 0.5 mm x 0.29 mm
- 0.3 A forward current
- Low forward voltage drop (typ. 400 mV at 300 mA)
- Low reverse current (< 4 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
VSKY034085	AEC-Q101	VSKY034085HG4-08	Single	CLP0805-2L	X4	0.271 mg	10 000	10 000

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	300	mA
Surge forward current	Single pulse; 8.3 ms half sine-wave	I_{FSM}	9	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}	12	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 =10V	I_R	-	4	µA
Leakage current	V_R =40V	I_R	-	18	µA
Forward voltage	I_R = 10 mA	V_F	272	330	mV
Forward voltage	I_R = 100 mA	V_F	346	407	mV
Forward voltage	I_R = 300 mA	V_F	400	485	mV
Diode capacitance	V_R = 0 V, f = 1 MHz	C_D	100	-	pF

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

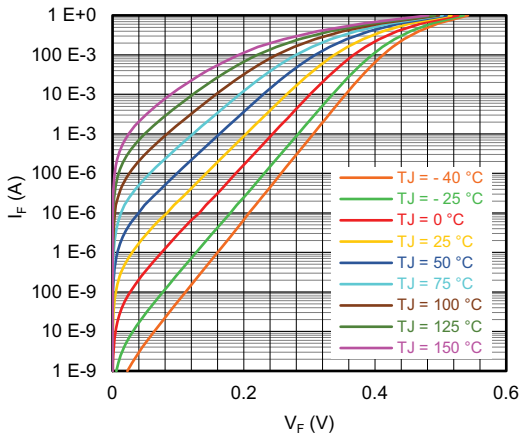


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

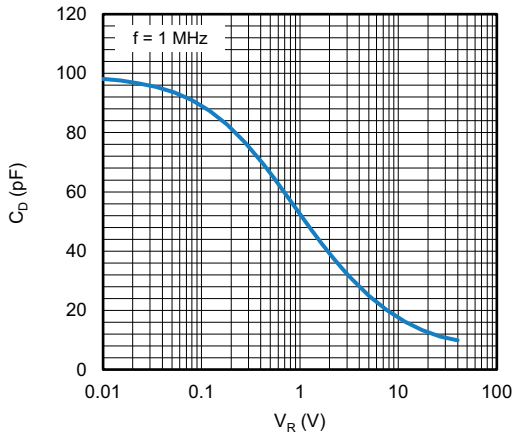


Fig. 2 - Typical Capacitance vs. Reverse Voltage

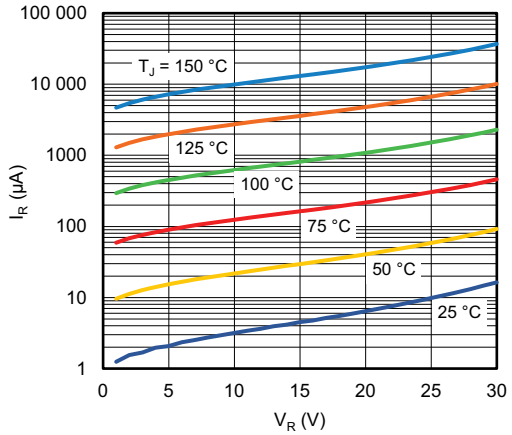
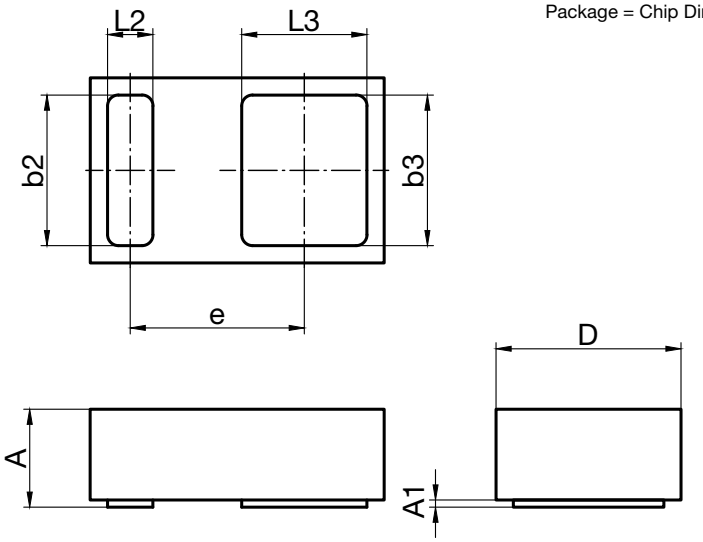
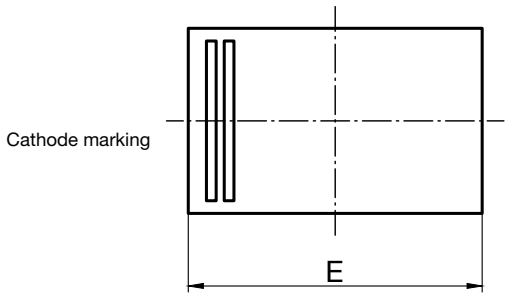


Fig. 3 - Typical Reverse Leakage Current vs. Reverse Voltage

PACKAGE DIMENSIONS in millimeters: **CLP0805-2L**

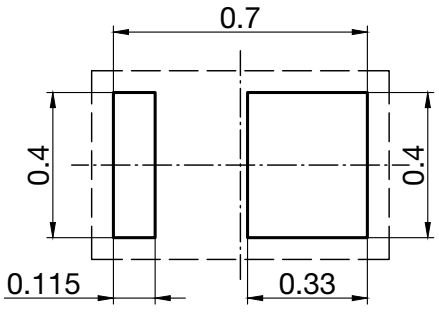
Package = Chip Dimensions in mm





	min	max
A	0.25	0.29
A1		0.02
b2	0.39	0.44
b3	0.39	0.44
D	0.49	0.53
E	0.79	0.83
e	0.48	
L2	0.10	0.15
L3	0.32	0.37

foot print recommendation:



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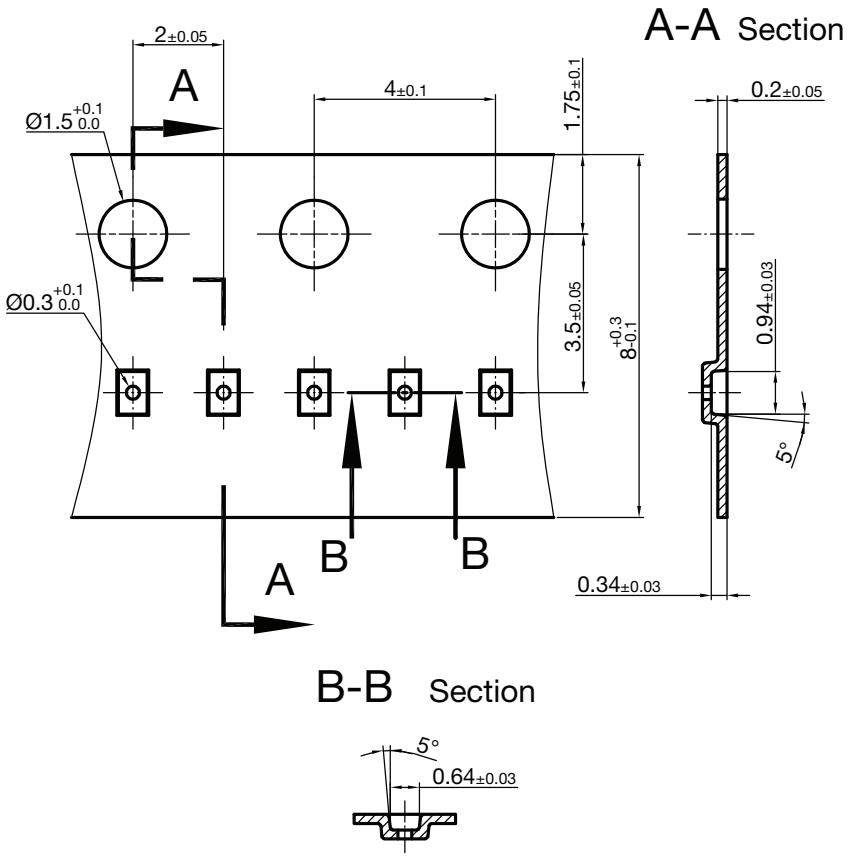
Footprint and soldering recommendation:
please see Application Note: www.vishay.com/doc?85917

CARRIER TAPE in millimeters: **CLP0805-2L**



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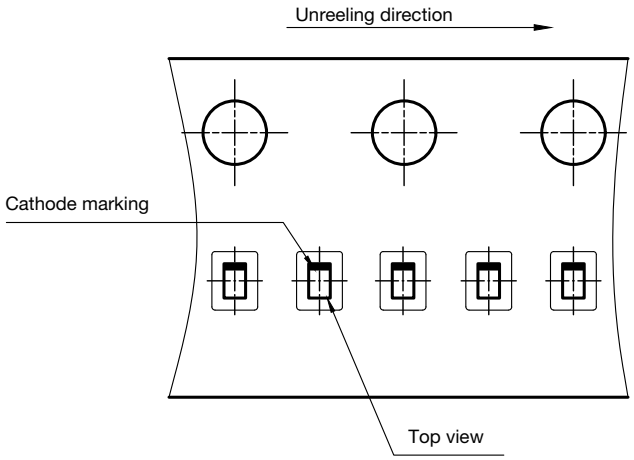
Cummulative tolerances of 10 sprocket holes is +/-0,2 mm

ORIENTATION IN CARRIER CLP0805-2L



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