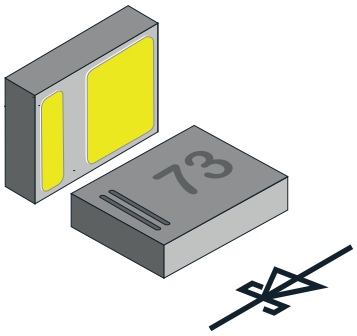
Schottky Rectifier Surface-Mount FlipKY® Gen 3



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions:
  1.2 mm x 0.9 mm x 0.29 mm
- 1.5 A forward current
- Low forward voltage drop (typ. 440 mV at 1.500 mA)
- Low reverse current (< 20 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
VSKY1530C9	AEC-Q101	VSKY1530C9HG4-08	Single	CLP1209-2L	73	0.73 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	30	V
Forward continuous current		I_F	1500	mA
Surge forward current	Single pulse; 8.3 ms half sine-wave	I_{FSM}	23	A

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

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to soldering point	Acc. JEDEC® JESD51-41	R_{thJS}	7	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	-	20	µA
Leakage current	V_R = 30 V	I_R	-	77	µA
Forward voltage	I_R = 100 mA	V_F	308	362	mV
Forward voltage	I_R = 1000 mA	V_F	408	466	mV
Forward voltage	I_R = 1500 mA	V_F	440	514	mV
Diode capacitance	V_R = 0 V, f = 1 MHz	C_D	275	-	pF

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

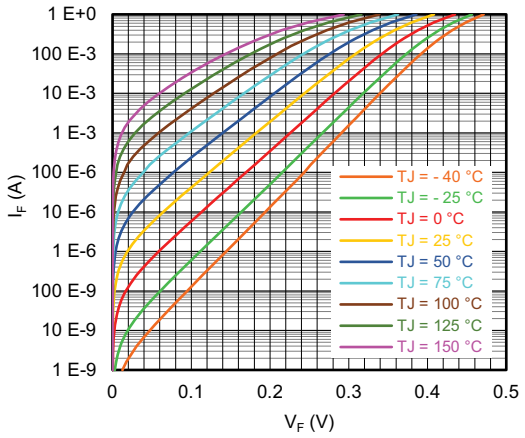


Fig. 1 - Typical Forward Current vs. Forward Voltage

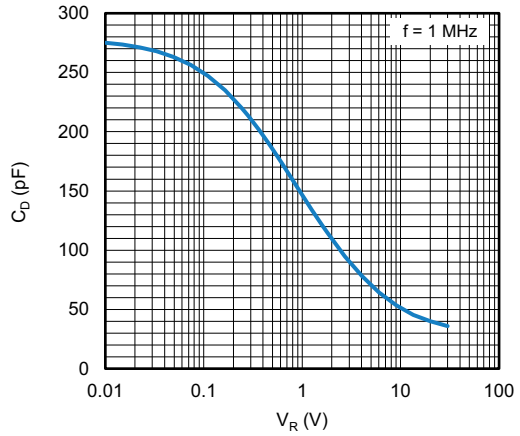


Fig. 2 - Typical Capacitance vs. Reverse Voltage

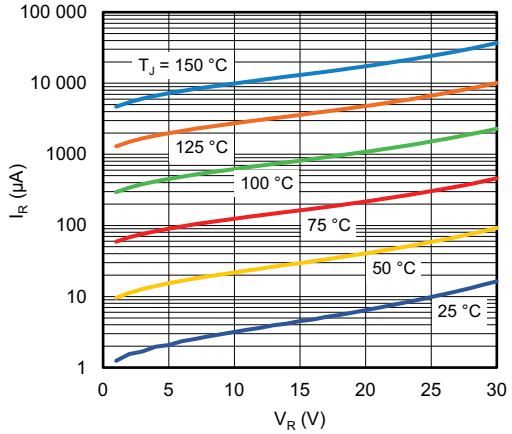
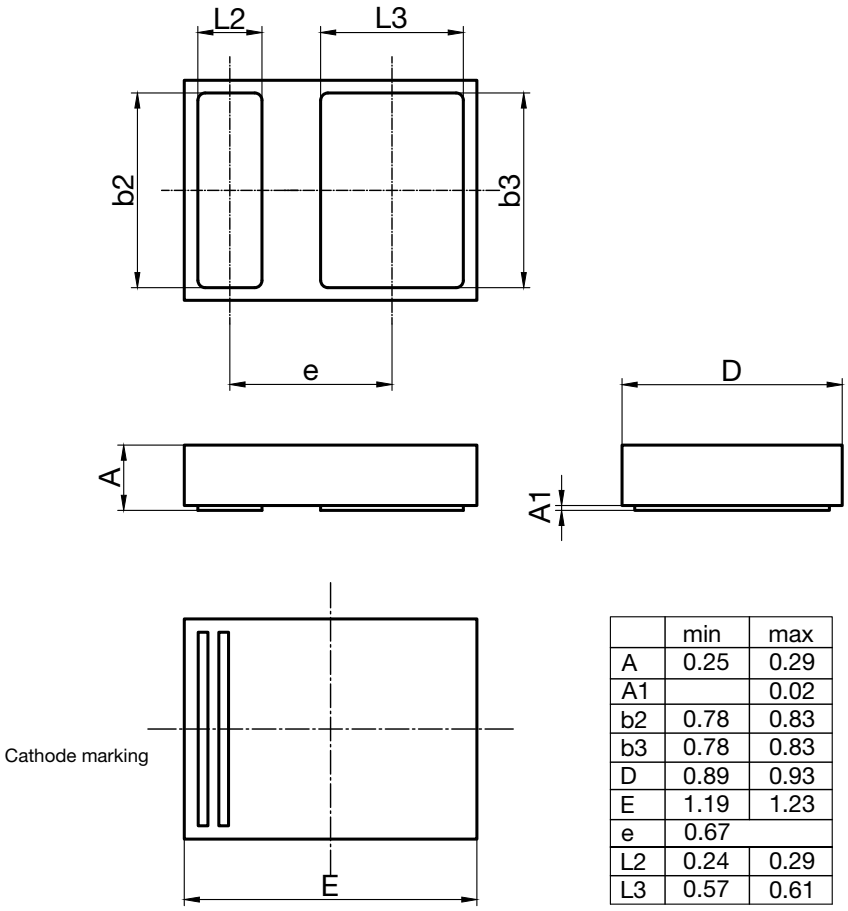


Fig. 3 - Typical Reverse Leakage Current vs. Reverse Voltage

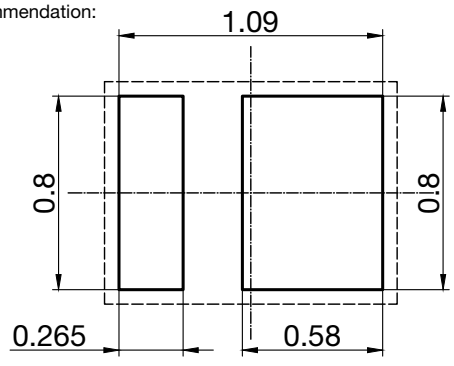
PACKAGE DIMENSIONS in millimeters: **CLP1209-2L**

Package=Chip Dimensions in mm



	min	max
A	0.25	0.29
A1		0.02
b2	0.78	0.83
b3	0.78	0.83
D	0.89	0.93
E	1.19	1.23
e	0.67	
L2	0.24	0.29
L3	0.57	0.61

foot print recommendation:



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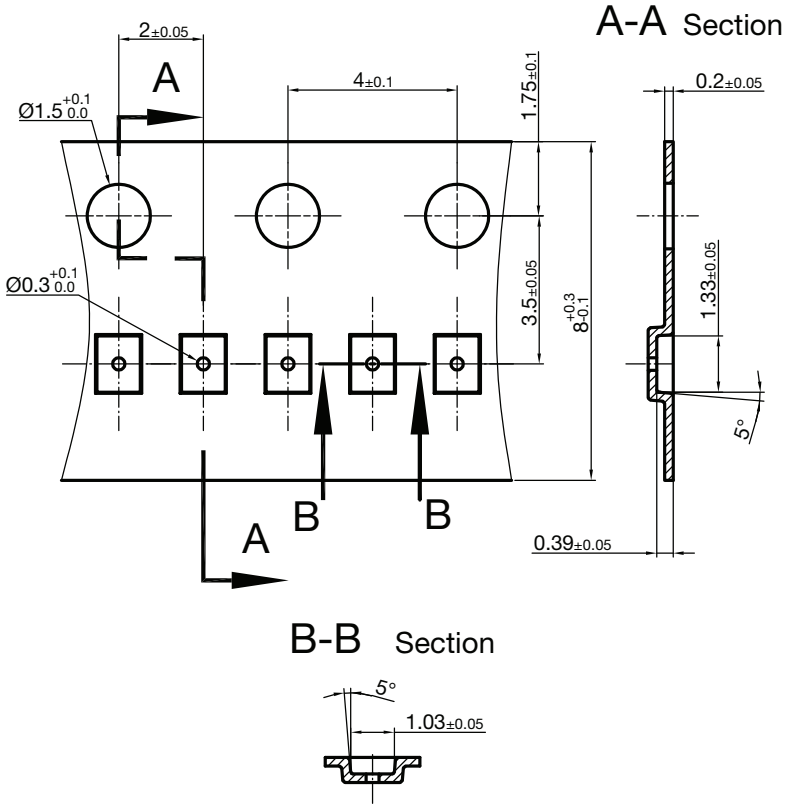
Footprint and soldering recommendation:
please see Application Note: www.vishay.com/doc?85917

CARRIER TAPE in millimeters: **CLP1209-2L**



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

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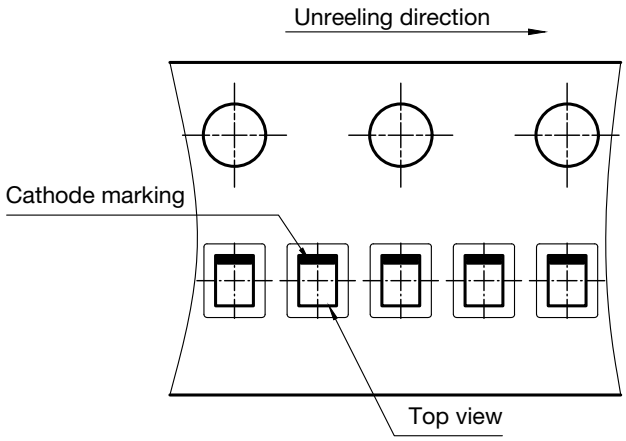
ORIENTATION IN CARRIER CLP1209-2L



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