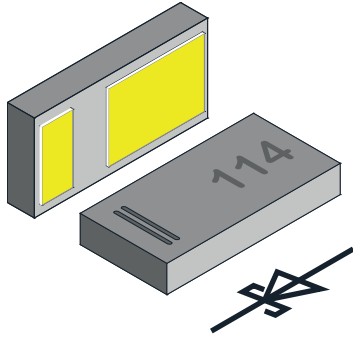


# Schottky Rectifier Surface-Mount FlipKY® Gen 3



## FEATURES

- Schottky diode for high-speed switching
- Very low dimensions: 1.6 mm x 0.8 mm x 0.29 mm
- 2.0 A forward current
- Low forward voltage drop (typ. 510 mV at 2000 mA)
- Low reverse current (< 25  $\mu$ A at 10 V)
- AEC-Q101 qualified
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

 AUTOMOTIVE  
GRADE

**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

## LINKS TO ADDITIONAL RESOURCES



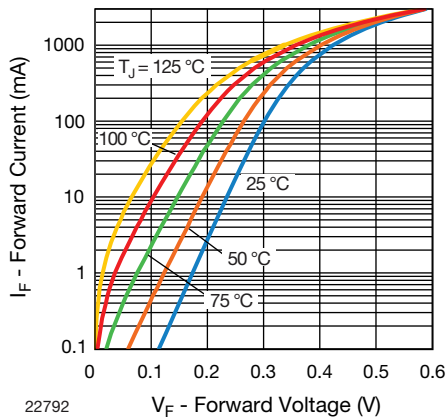
PARTS TABLE								
PART	GRADE	ORDERING CODE	CIRCUIT CONFIGURATION	PACKAGE NAME	TYPE MARKING	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY2040G8	AEC-Q101	VSKY2040G8HG4-08	Single	CLP1608-2L	114	0.84 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		$V_R$	40	V
Forward continuous current		$I_F$	2000	mA
Surge forward current	Single pulse; 8.3 ms half sine-wave	$I_{FSM}$	28	A

THERMAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to soldering point	Acc. JEDEC® JESD51-41	$R_{thJS}$	6	K/W
Maximum operating junction temperature		$T_j \text{ max.}$	150	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	-65 to + 150	$^{\circ}\text{C}$

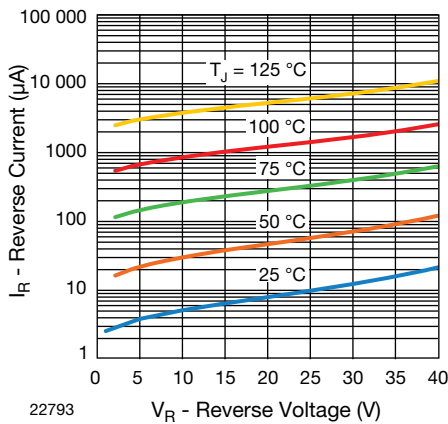
ELECTRICAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Leakage current	$V_R = 10\text{ V}$	$I_R$	-	25	$\mu\text{A}$
Leakage current	$V_R = 40\text{ V}$	$I_R$	-	110	$\mu\text{A}$
Forward voltage	$I_F = 100\text{ mA}$	$V_F$	300	343	mV
Forward voltage	$I_F = 1000\text{ mA}$	$V_F$	425	505	mV
Forward voltage	$I_F = 2000\text{ mA}$	$V_F$	510	620	mV
Diode capacitance	$V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_D$	340	-	pF

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



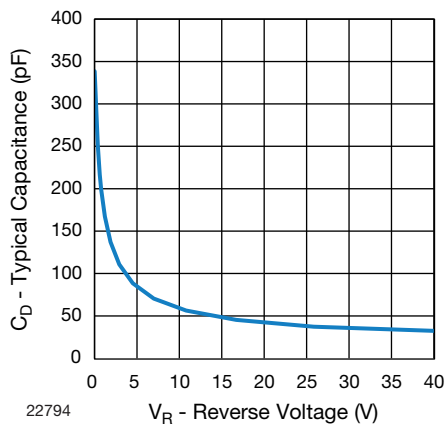
22792

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



22793

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

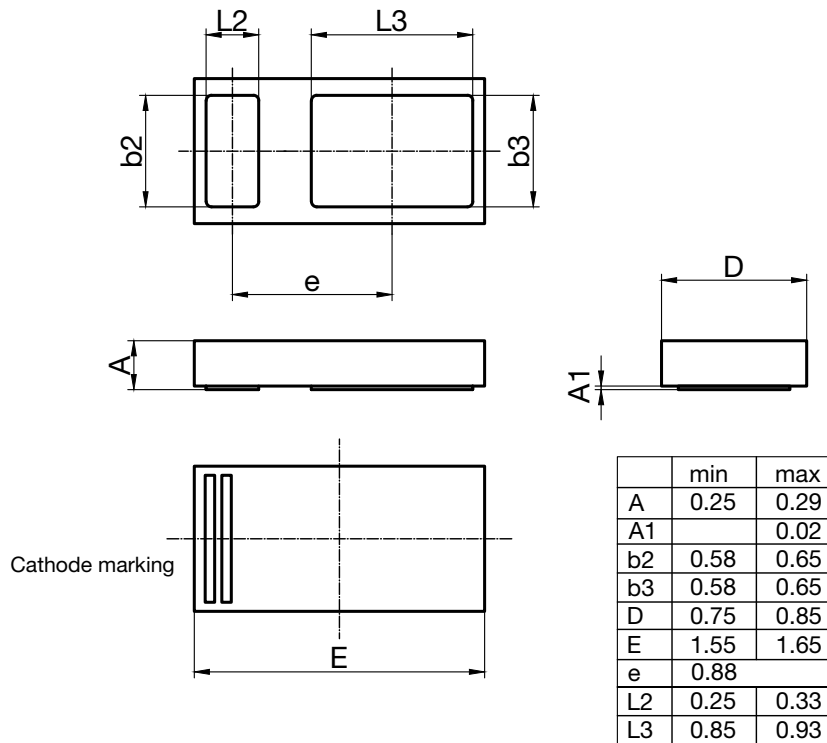


22794

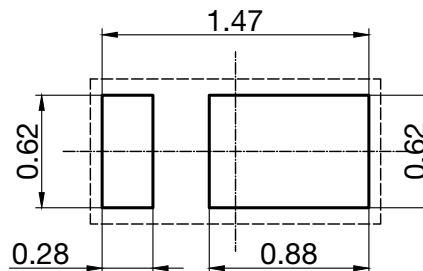
Fig. 3 - Typical Capacitance vs. Reverse Voltage

**PACKAGE DIMENSIONS** in millimeters: **CLP1608-2L**

Package=Chip Dimensions in mm



foot print recommendation:



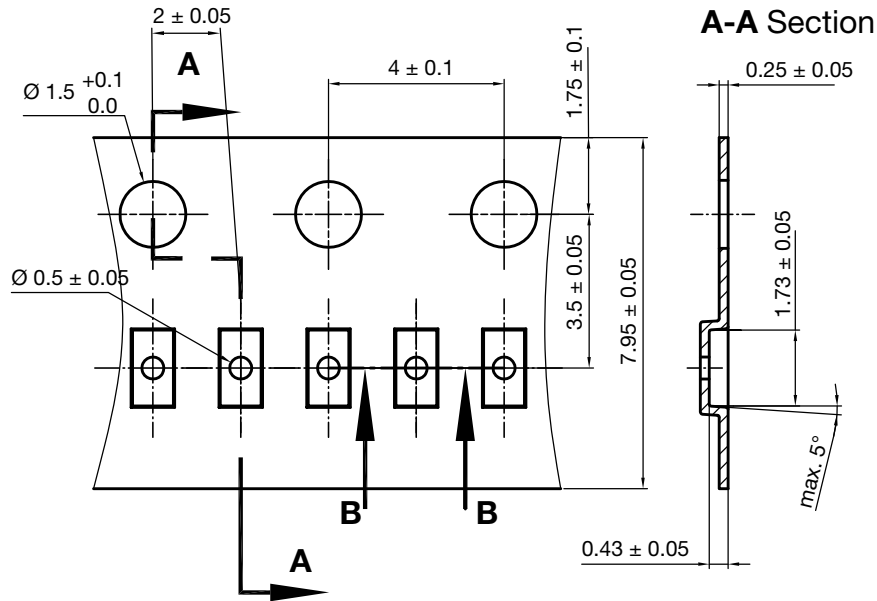
Document no.:S8-V-3906.04-033 (4)  
 Created - Date: 10. Feb. 2014  
 Rev.5 - Date: 19. Dec. 2023  
 23233

**Footprint and soldering recommendation:**

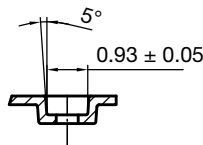
 please see Application Note: [www.vishay.com/doc?85917](http://www.vishay.com/doc?85917)



**CARRIER TAPE** in millimeters: **CLP1608-2L**



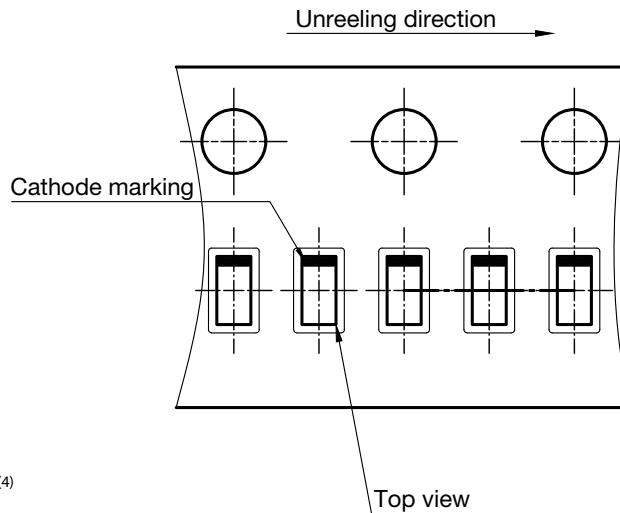
**B-B Section**



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Rev.2 - Date: 28. Jan. 2016  
23064

Cummlative tolerances of 10 sprocket holes is  $\pm 0.2$  mm

**ORIENTATION IN CARRIER CLP1608-2L**



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Created - Date: 10. Feb. 2014  
Rev.2 - Date: 19.12.2023  
23063



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