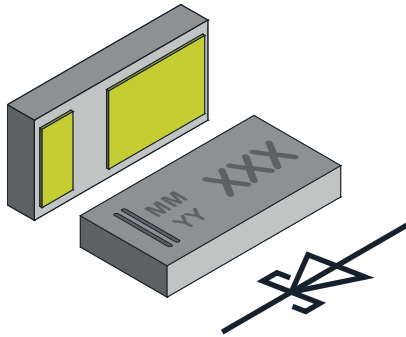


Schottky Rectifier Surface Mount FlipKY® Gen 2



FEATURES

- Schottky diode for high-speed switching
- Very low dimensions - 1.6 mm x 0.8 mm x 0.31 mm
- 2.0 A forward current
- Low forward voltage drop (typ. 500 mV at 2.0 A)
- Low reverse current (< 20 μ A at 10 V)
- Commercial grade
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

MECHANICAL DATA

Case: CLP1608-2L

Int. construction: single

PARTS TABLE							
PART	ORDERING CODE	INTERNAL CONSTRUCTION	PACKAGE NAME	TYPE CODE	WEIGHT	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VSKY20301608	VSKY20301608-G4-08	Single diode	CLP1608-2L	103	0.840 mg	5000	5000

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Maximum repetitive peak reverse voltage		V_{RRM}	30	V	
Maximum average forward rectified current	$V_F = 0.5\text{ V}$, $R_{th} = 100\text{ K/W}$	$I_{F(AV)}$	2	A	
Peak forward surge current	8.3 ms single half sine-wave	I_{FSM}	28	A	
Power dissipation	On FR-4 board 50 mm x 50 mm 35 μ m Cu single sided	P_{tot}	1000	mW	

THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Thermal resistance junction to ambient air	On FR-4 board 50 mm x 50 mm 35 μ m Cu single sided	R_{thJA}	100	K/W	
Maximum operating junction temperature		T_j	125	$^{\circ}\text{C}$	
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		20	μ A	
	$V_R = 30\text{ V}$	I_R		150	μ A	
Forward voltage	$I_F = 100\text{ mA}$	V_F	290	320	mV	
	$I_F = 1\text{ A}$	V_F	400	430	mV	
	$I_F = 2\text{ A}$	V_F	500	530	mV	
Diode capacitance	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_D	375		pF	



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

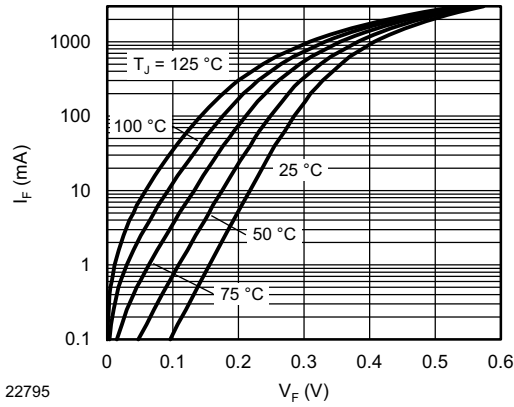


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

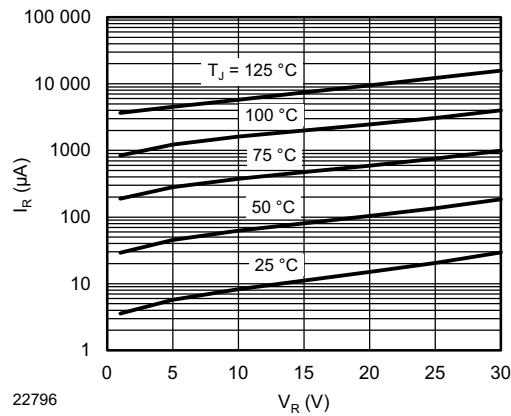


Fig. 2 - Typical Reverse Current vs. Reverse Voltage at Various Temperatures

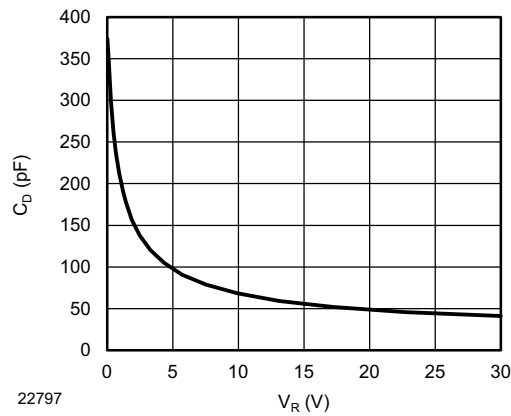
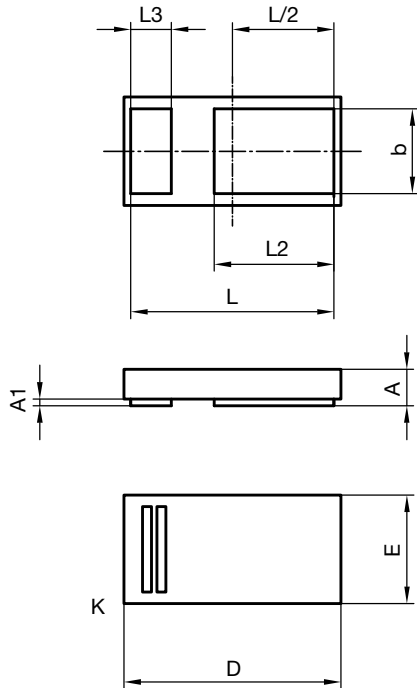


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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


		A	A1	b	D	E	L	L2	L3
mm	min.	0.25		0.58	1.6 nom.	0.8 nom.	1.42	0.85	0.25
	max.	0.31	0.02	0.65			1.52	0.93	0.33

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22739

Footprint and soldering recommendation:

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



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