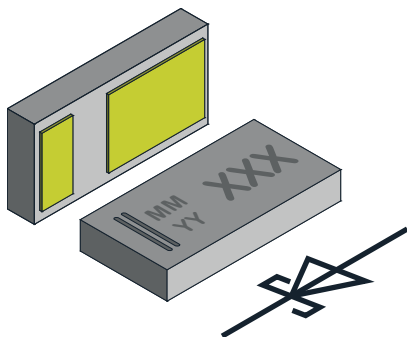


Schottky Rectifier Surface Mount FlipKY® Gen 2



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 µA 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 °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 V, R _{th} = 100 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 µm Cu single sided	P _{tot}	1000	mW

THERMAL CHARACTERISTICS (T_{amb} = 25 °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 µm Cu single sided	R _{thJA}	100	K/W
Maximum operating junction temperature		T _j	125	°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
	V _R = 30 V	I _R		150	µA
Forward voltage	I _F = 100 mA	V _F	290	320	mV
	I _F = 1 A	V _F	400	430	mV
	I _F = 2 A	V _F	500	530	mV
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D	375		pF



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

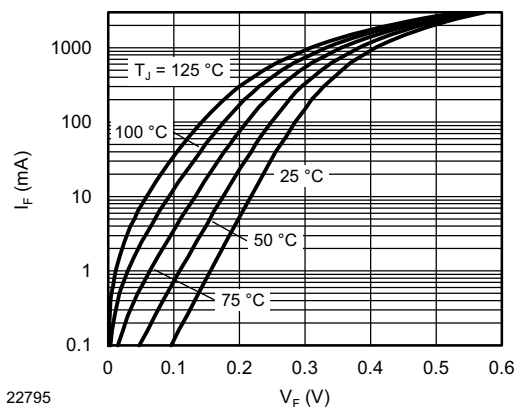


Fig. 1 - Typical Forward Current vs. Forward Voltage at Various Temperatures

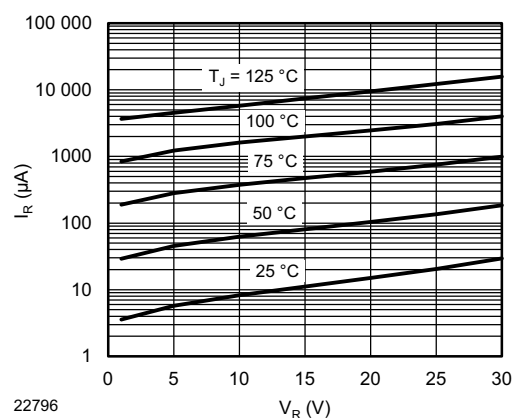


Fig. 2 - Typical Reverse Current vs. Reverse Voltage at Various Temperatures

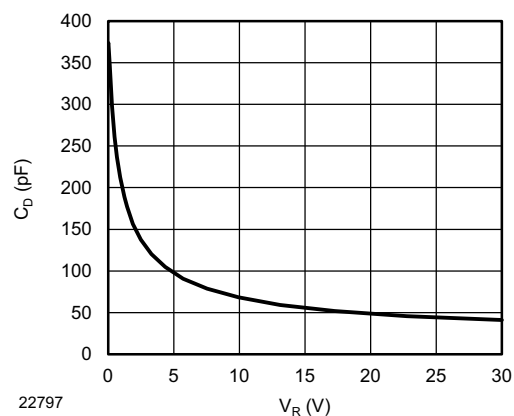
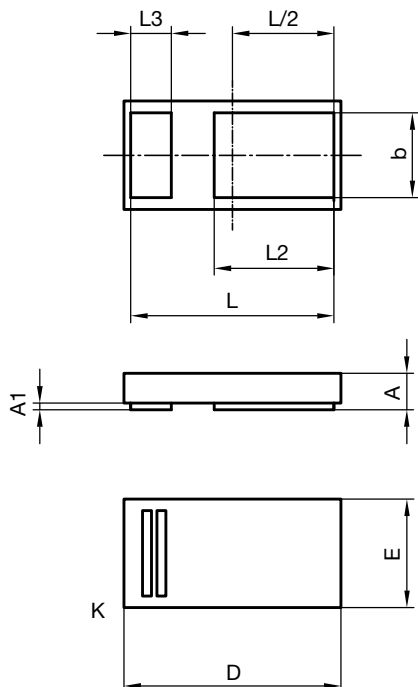


Fig. 3 - Typical Capacitance vs. Reverse Voltage

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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