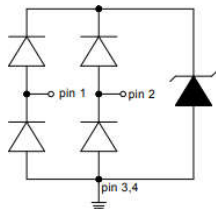


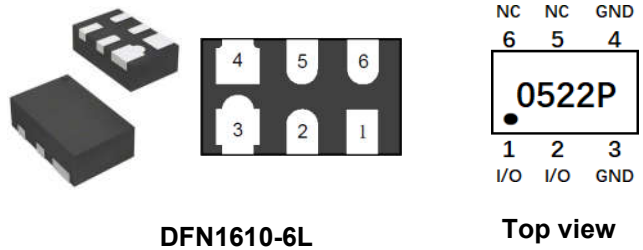
Features

- * Ultra low leakage: nA level
- * Ultra low capacitance
- * RoHS Compliant
- * REACH & SVHC Compliant
- * Halogen Compliant
- * DFN1610-6L Package

Circuit Diagram



Package and Marking Diagram

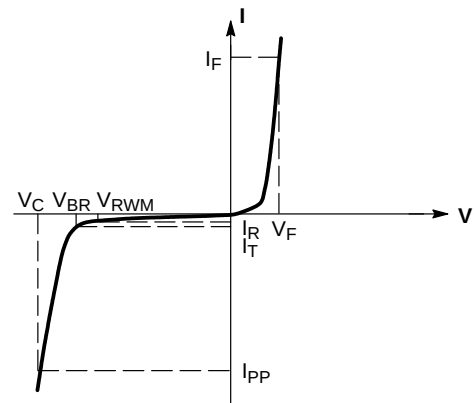


Ordering Information

Part Number	Packaging	Reel Size
RCLAMP0522P-FS	3000/Tape & Reel	7 inch

Portion Electronics Parameter

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}



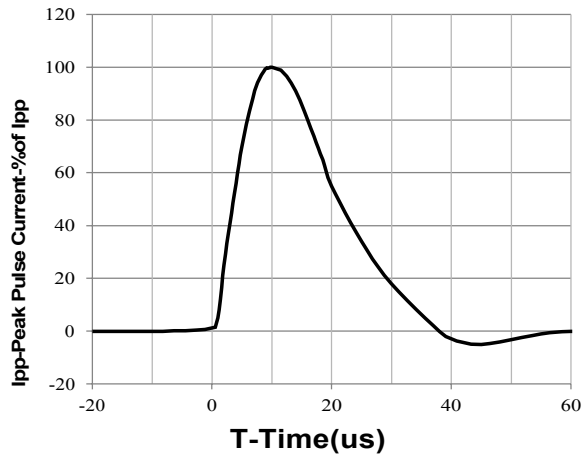
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs pulse)	P_{pk}	60	W
Peak Pulse Current (8/20 μs pulse)	I_{PP}	4	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 20	kV
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T_J	-40 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^{\circ}\text{C}$

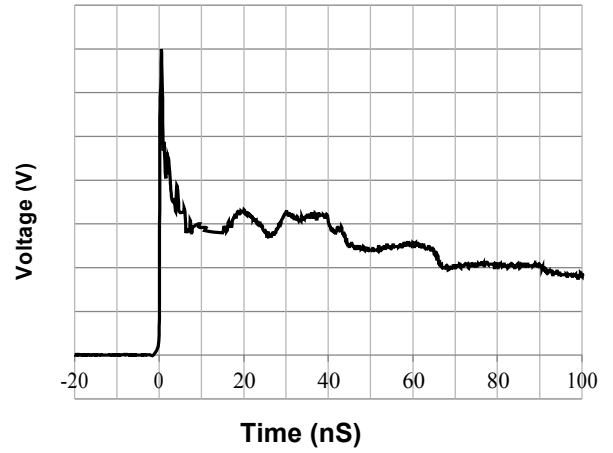
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, I/O-GND	6	7.1	9	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, I/O-I/O	6.5	8	9.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$			100	nA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$ (8/20 μs pulse), I/O-GND		8	10	V
Clamping Voltage	V_C	$I_{PP} = 4\text{A}$ (8/20 μs pulse), I/O-GND		10	15	V
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$ (8/20 μs pulse), I/O-I/O		9.3	11	V
Clamping Voltage	V_C	$I_{PP} = 4\text{A}$ (8/20 μs pulse), I/O-I/O		16	20	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-GND		0.6	0.9	pF
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-I/O		0.3	0.5	pF

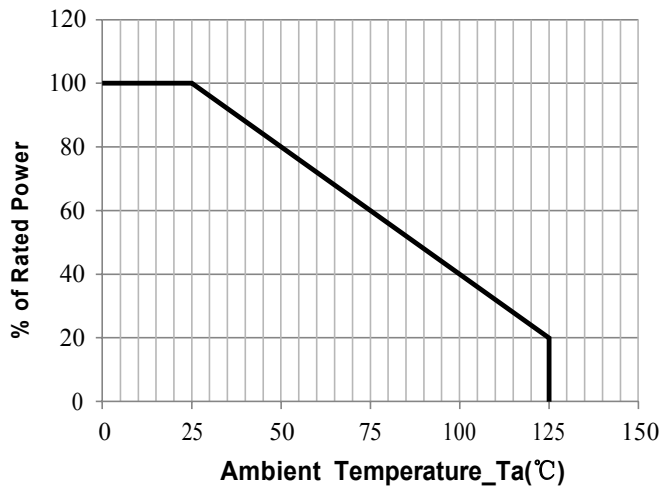
Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



8 / 20us Pulse Waveform

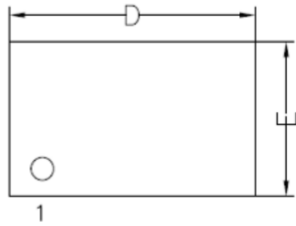


IEC61000-4-2 Pulse Waveform

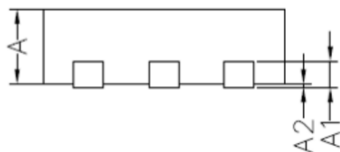


Power Derating Curve

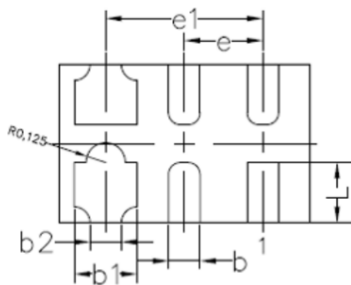
DFN1610-6L Package Outline Drawing



TOP VIEW



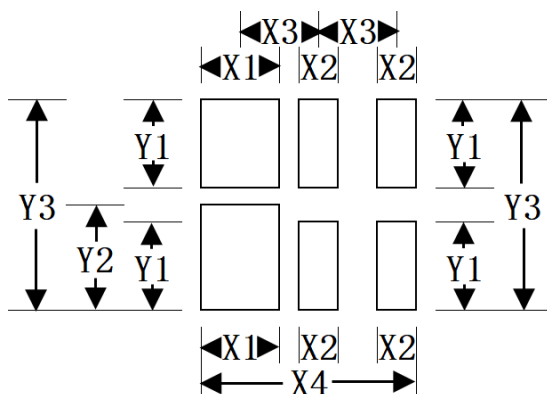
SIDE VIEW



BOTTOM VIEW

SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	Min	Typ	Max	Min	Typ	Max
D	1.55	1.60	1.65	0.0610	0.0630	0.0650
E	0.95	1.00	1.05	0.0374	0.0394	0.0413
b1	0.35	0.40	0.45	0.0138	0.0158	0.0177
b2	0.20 REF			0.0079 REF		
b	0.15	0.20	0.25	0.0059	0.0079	0.0098
L	0.33	0.38	0.43	0.0130	0.0150	0.0169
e	0.50 BSC			0.0197 BSC		
e1	1.00 BSC			0.0394 BSC		
A	0.50	0.55	0.60	0.0197	0.0217	0.0236
A1	0.152 REF			0.0060 REF		
A2	--	--	0.05	--	--	0.0020

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X1	0.45	0.018
X2	0.25	0.010
X3	0.50	0.020
X4	1.35	0.053
Y1	0.50	0.020
Y2	0.60	0.024
Y3	1.20	0.047

Note:

The land pattern is for reference purposes only.