

Ultra Low Capacitance TVS Diode Array

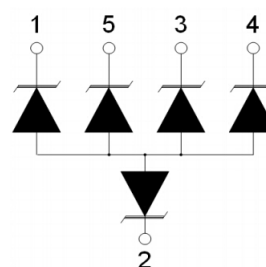
Features:

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 17\text{kV}$
Contact discharge: $\pm 20\backslash 15\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 3A (8/20ns)
- RoHS Compliant

DFN2010P5



Pin Configuration



Applications:

- USB 3.1 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

Mechanical Characteristics

- Package: DFN2010P5
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 12,000pc
- Reel Size: 7 inch

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pp}	75	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 17	Kv
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
KWULC052010P5	UL5A	5	6	1	15	25	3	0.1	0.2

Characteristic Curves

Fig1. 8/20μ s Pulse Waveform

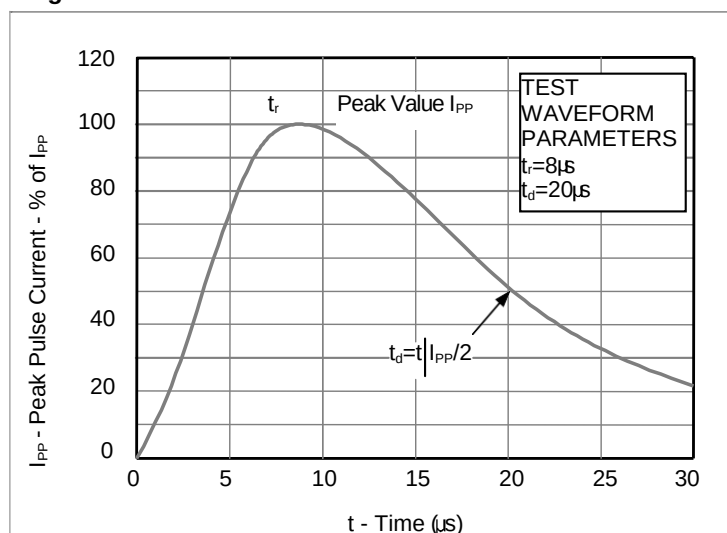


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

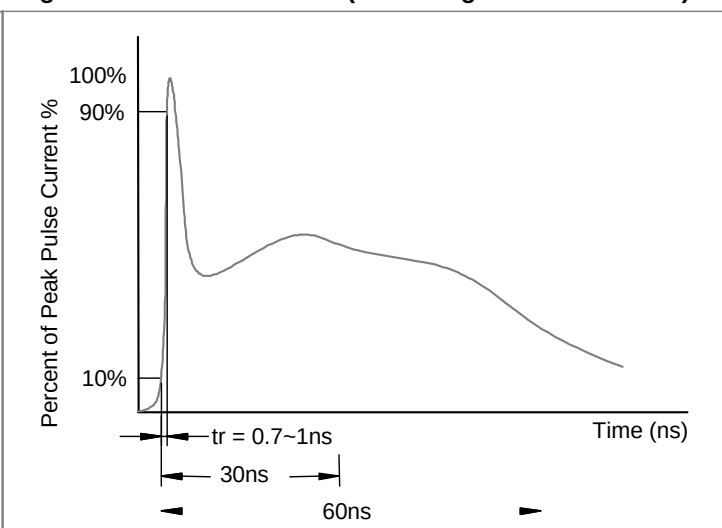
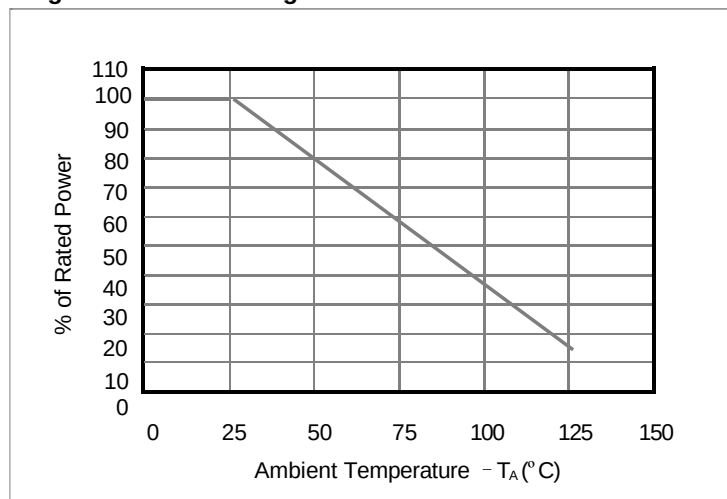
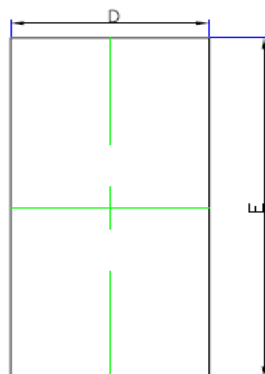


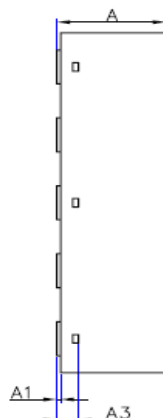
Fig3. Power Derating Curve



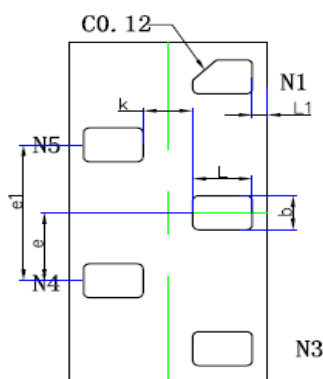
DFN2010P5 PACKAGE OUTLINE & DIMENSIONS



TOP VIEW

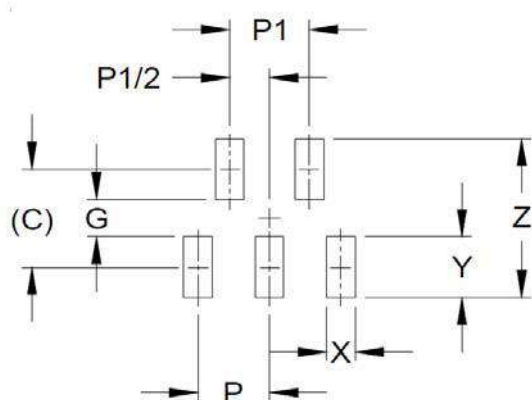


SIDE VIEW



BOTTOM VIEW

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.340	0.400	0.013	0.016
A1	-0.004	0.046	0.000	0.002
A3	0.110REF.		0.004REF.	
D	0.900	1.100	0.035	0.043
E	1.900	2.100	0.075	0.083
k	0.250REF.		0.010REF.	
b	0.150	0.250	0.006	0.010
e	0.400BSC.		0.016BSC.	
e1	0.800BSC.		0.031BSC.	
L	0.224	0.376	0.009	0.015
L1	0.075REF.		0.003REF.	



DIMENSIONS	
DIM	MILLIMETERS
C	(0.65)
G	0.25
P	0.45
P1	0.50
X	0.18
Y	0.40
Z	1.05