

# ESDU1201P

## Transient Voltage Suppressors

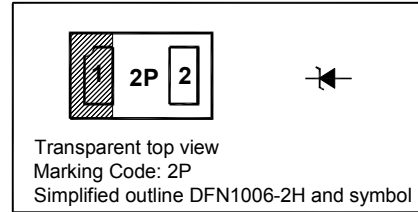
for ESD Protection

### Features

- Protects one I/O or power line
- Low leakage Current
- Low clamping voltage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	8	A
IEC61000-4-2 (ESD) Air Contact	$V_{PP}$	$\pm 20$ $\pm 15$	KV
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	200	W
Operation Temperature Range	$T_j$	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	12	V
Reverse Breakdown Voltage at $I_T = 1 \text{ mA}$	$V_{(BR)R}$	13.3	17.5	V
Forward Voltage at $I_F = 10 \text{ mA}$	$V_F$	-	1	V
Reverse Current at $V_{RWM} = 12 \text{ V}$	$I_R$	-	1	$\mu\text{A}$
Clamping Voltage at $I_{PP} = 1 \text{ A}$ , $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 8 \text{ A}$ , $t_p = 8/20 \mu\text{s}$	$V_C$	-	19 25	V
Junction Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_j$	-	60	pF

**TOP DYNAMIC**



Dated: 01/07/2013 Rev: 01

**TOP DYNAMIC**



ISO14001 : 2004  
Certificate No. 121505007

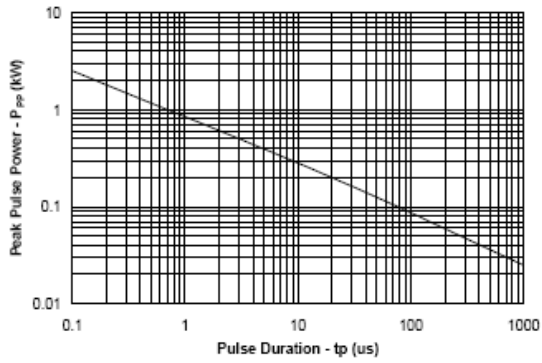
ISO 9001 : 2008  
Certificate No. 61141012

OHSAS 18001 : 2007  
Certificate No. 05151506006

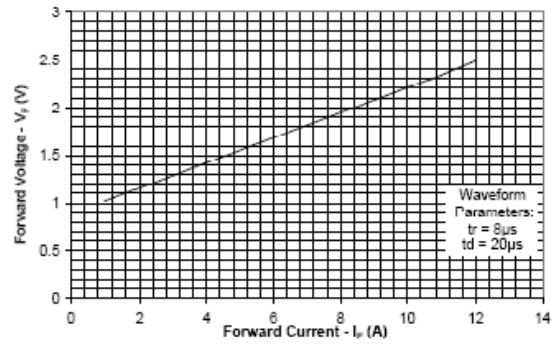
IECQ QC 080000  
Certificate No. E2A1W0007 K4M22

Dated: 01/07/2013 Rev: 01

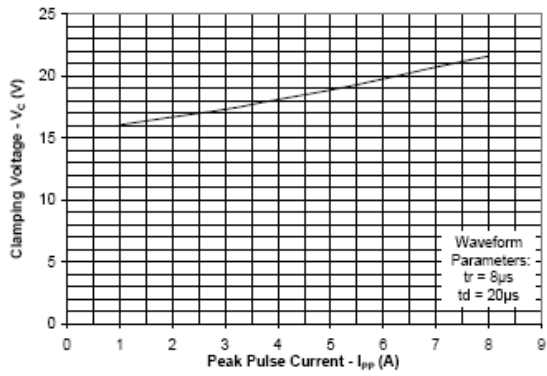
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



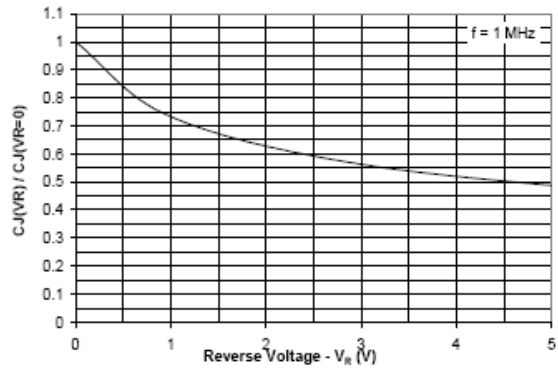
**Forward Voltage vs. Forward Current**



**Clamping Voltage vs. Peak Pulse Current**



**Junction Capacitance vs. Reverse Voltage**

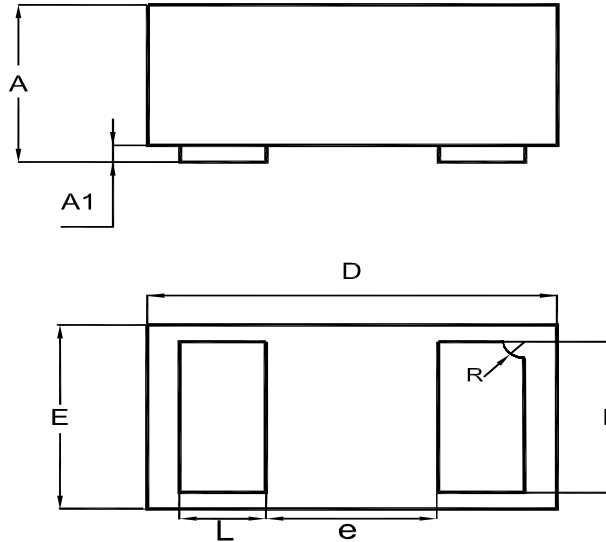


# ESDU1201P

## PACKAGE OUTLINE

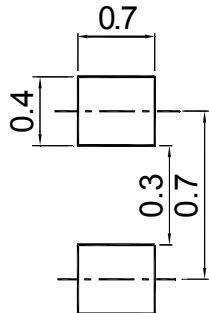
Plastic surface mounted package

DFN1006-2H



UNIT	A	A1	b	D	E	e	L	R
mm	0.51	0.05	0.55	1.05	0.65	0.4	0.3	0.15
	0.46	0	0.45	0.95	0.55		0.2	0.05

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2H	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

**TOP DYNAMIC**



ISO14001 : 2004 Certificate No. 121505007  
ISO 9001 : 2008 Certificate No. 61114112  
OHSAS 18001 : 2007 Certificate No. 05151506006  
IECQ QC 080000 Certificate No. E2411000714112

Dated: 01/07/2013 Rev: 01