

# ESDU2506BP

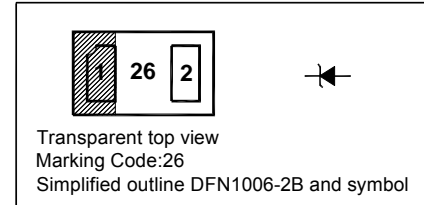
## Transient Voltage Suppressors

### Features

- Protects one data line
- Low leakage current
- Low Operating voltage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	6	A
IEC61000-4-2 (ESD) Air Contact	$V_{PP}$	$\pm 30$ $\pm 30$	KV
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	42	W
Operation Temperature Range	$T_j$	- 40 to + 85	$^\circ\text{C}$
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	$V_{RWM}$	-	2.5	V
Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	3	-	V
Reverse Current at $V_{RWM} = 2.5 \text{ V}$	$I_R$	-	1	$\mu\text{A}$
Clamping Voltage at $I_{PP} = 1 \text{ A}$ , $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 6 \text{ A}$ , $t_p = 8/20 \mu\text{s}$	$V_C$	- -	5 7	V
Junction Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_j$	-	180	pF

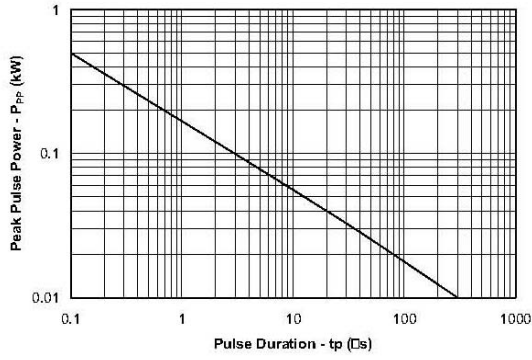
**TOP DYNAMIC**



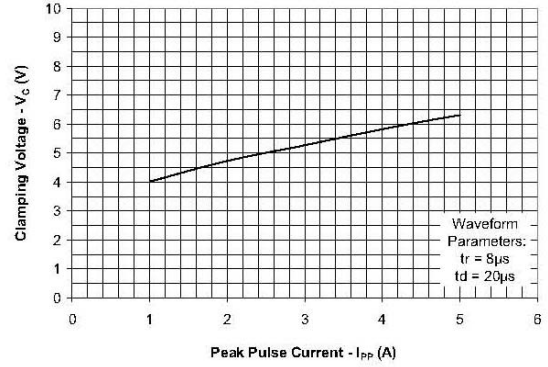
ISO14001 : 2004 Certificate No. 121505007    ISO 9001 : 2008 Certificate No. 59114012    OHSAS 18001 : 2007 Certificate No. 0519150608    IECQ QC 080000 Certificate No. EQ4100014002

Dated: 11/11/2015 Rev: 01

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



### Clamping Voltage vs. Peak Pulse Current



## TOP DYNAMIC

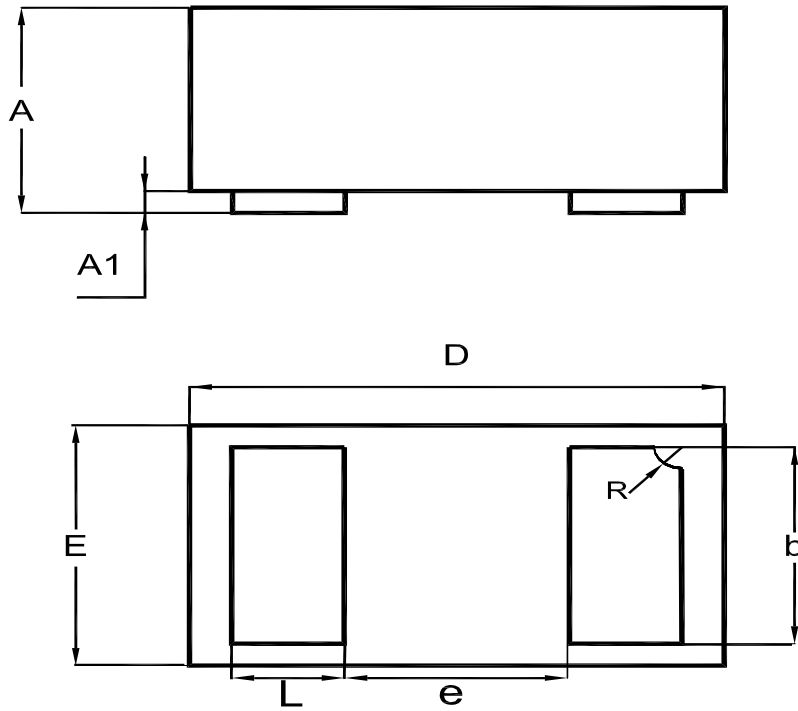


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## PACKAGE OUTLINE

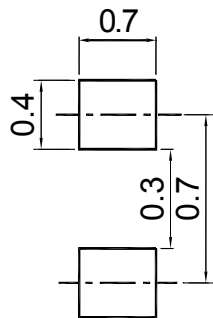
Plastic surface mounted package

DFN1006-2B



UNIT	A	A1	b	D	E	e	L	R
mm	0.40 0.36	0.05 0	0.55 0.45	1.05 0.95	0.65 0.55	0.4	0.3 0.2	0.15 0.05

## Recommended Soldering Footprint



## Packing information

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

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