

ESDUL5V3BP

Transient Voltage Suppressors

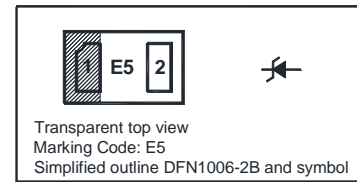
for ESD Protection

Features

- Low capacitance
- Low reverse current

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
ESD discharge (IEC61000-4-2) Contact Air	V_{ESD}	± 20 ± 20	KV
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	3	A
Operating Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

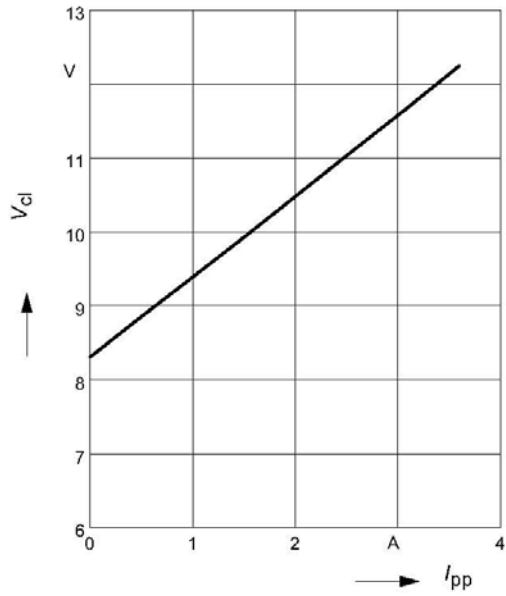
Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	5.3	V
Holding Voltage at $I_{\text{R}} = 1 \text{ mA}$, from pin 1 to pin 2	V_{BR}	6	-	V
Reverse Current at $V_{\text{RWM}} = 5.3 \text{ V}$ from pin 1 to pin 2	I_{R}	-	100	nA
Clamping Voltage at $I_{\text{PP}} = 1 \text{ A}$, $t_p = 8/20 \mu\text{s}$, from pin 1 to pin 2 at $I_{\text{PP}} = 3 \text{ A}$, $t_p = 8/20 \mu\text{s}$, from pin 1 to pin 2	V_{C}	- -	13 15	V
Forward clamping Voltage at $I_{\text{PP}} = 1 \text{ A}$, $t_p = 8/20 \mu\text{s}$, from pin 2 to pin 1 at $I_{\text{PP}} = 3 \text{ A}$, $t_p = 8/20 \mu\text{s}$, from pin 2 to pin 1	V_{FC}	- -	4 6	V
Junction Capacitance at $V_{\text{R}} = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	0.6	pF

TOP DYNAMIC

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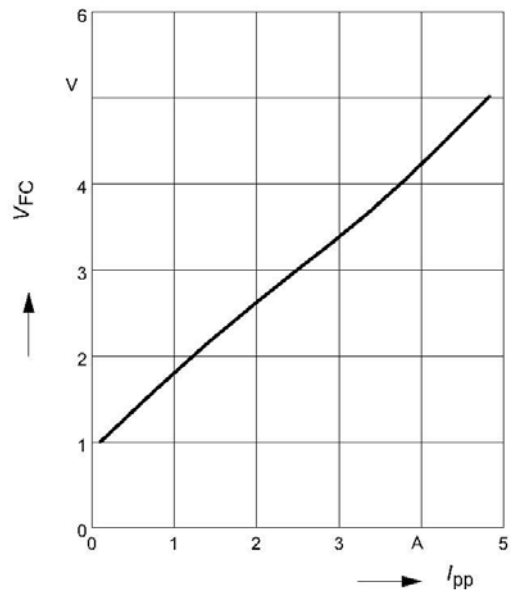
Clamping voltage, $V_{cl} = f(I_{pp})$

$t_p = 8 / 20 \mu s$, from pin 1 to 2



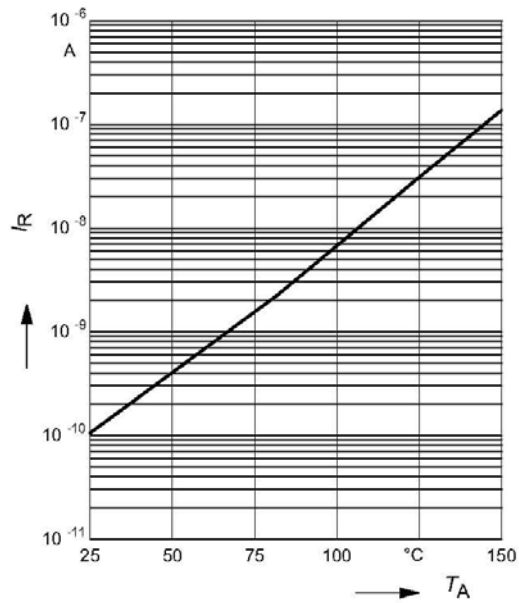
Forward clamping voltage $V_{FC} = f(I_{pp})$

$t_p = 8 / 20 \mu s$, from pin 2 to 1



Reverse current $I_R = f(T_A)$

$V_R = 5.3 V$, from pin 1 to 2



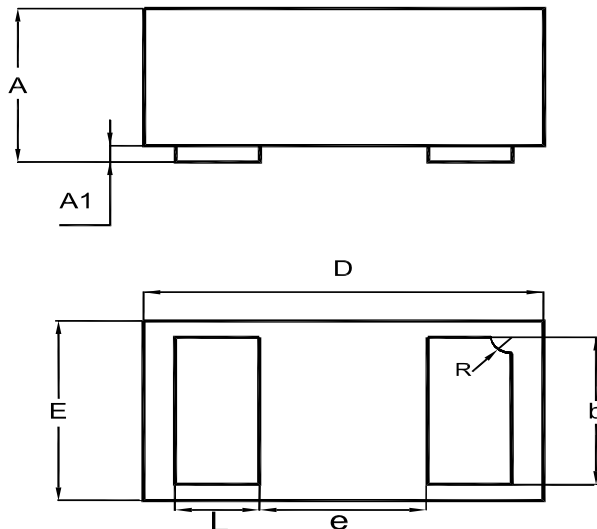
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PACKAGE OUTLINE

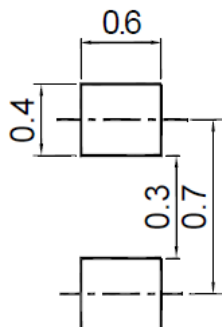
Plastic surface mounted package; 2 leads

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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