

# E5V0SBPC1AD-HAF

## ESD Protection Diode

### Features

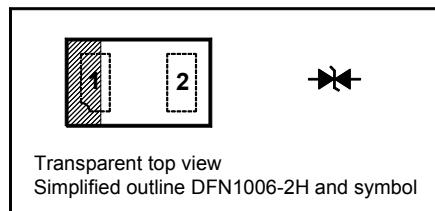
- Low clamping voltage
- Low leakage current
- Halogen and Antimony Free(HAF),  
RoHS compliant

### Applications

- Wearable Devices
- TV and Set Top Box
- Smart Phone and Tablet PC

### PINNING

PIN	DESCRIPTION
1	Anode
2	Anode

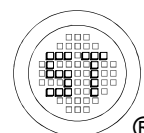


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	77	W
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	7	A
ESD (IEC61000-4-2) Air Contact	$V_{ESD}$	$\pm 30$ $\pm 30$	KV
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	5	V
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	5.4	-	8.4	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	$I_R$	-	-	100	nA
Clamping Voltage at $I_{PP} = 7 \text{ A}$ , $t_p = 8/20 \mu\text{s}$	$V_C$	-	-	11	V
Junction Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_j$	-	11	20	pF



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## Electrical Characteristics Curves

Fig 1. Pulse Waveform

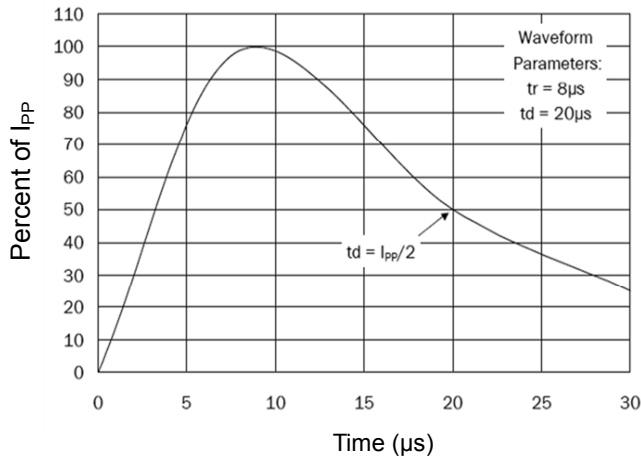


Fig 2. Power Derating Curve

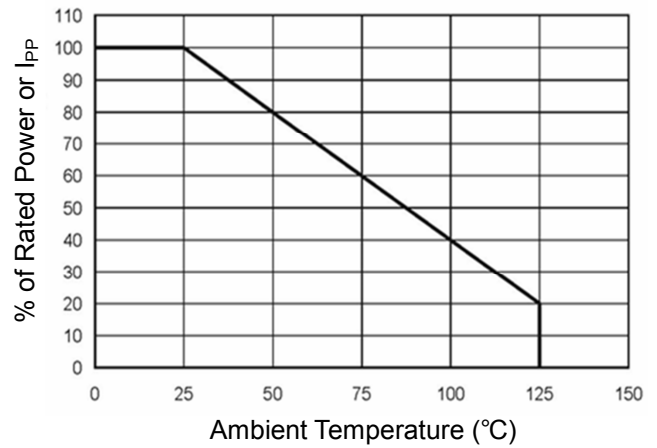


Fig 3. Clamping Voltage Curve

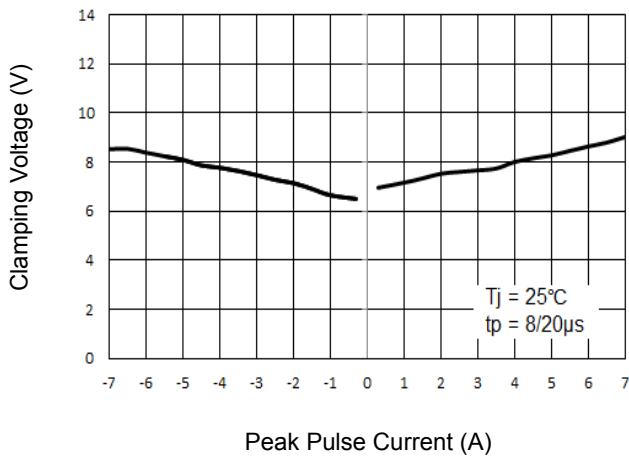


Fig 4. Junction Capacitance

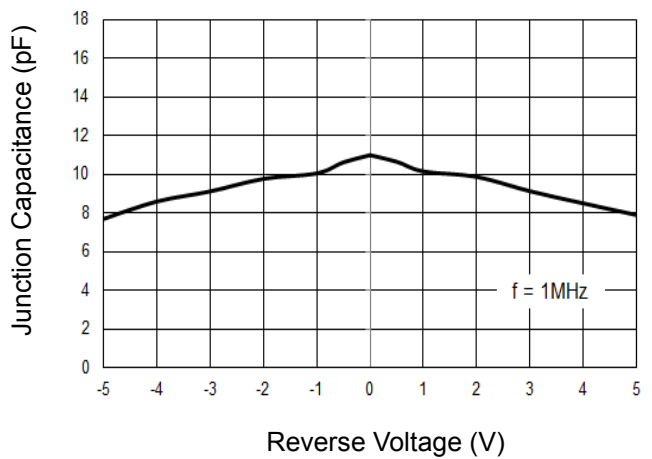
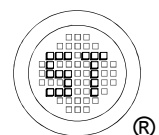
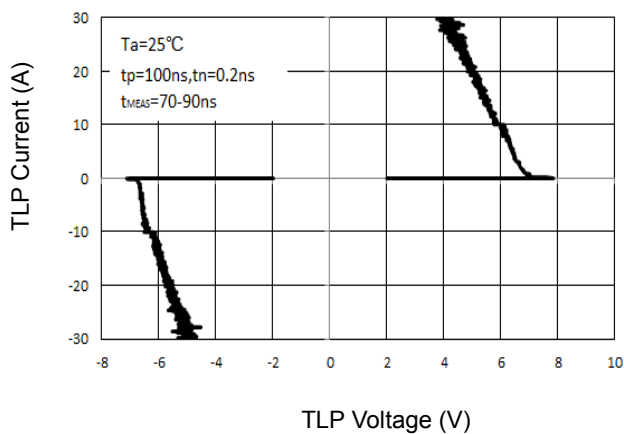


Fig 5 TLP Curve

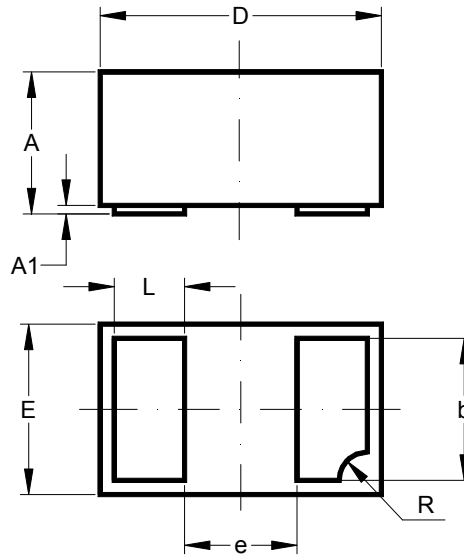


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## PACKAGE OUTLINE

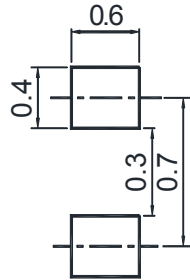
Plastic surface mounted package; 2 leads

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			

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2H	8	$2 \pm 0.1$	$0.079 \pm 0.004$	178	7	10,000

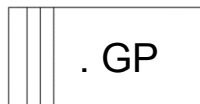
## Marking information

" GP " = Part No.

" III " = Marking line

" . " = HAF (Halogen and Antimony Free)

Font type: Arial



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