

ESD9P Series-HAF

Transient Voltage Suppressors

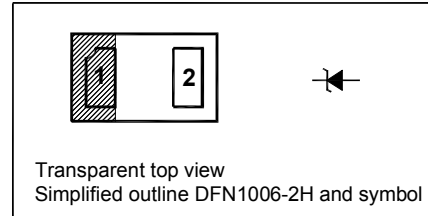
for ESD Protection

Features

- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
IEC61000-4-2 (ESD) Contact	-	± 30	KV
Power Dissipation on FR-5 Board ¹⁾	P_D	150	mW
Junction Temperature	T_j	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

¹⁾FR-5 = 1.0 x 0.75 x 0.62 in

Characteristics at $T_a = 25^\circ\text{C}$ ($V_F = 0.9\text{ V Max. at } I_F = 10\text{ mA}$)

Type	Marking Code	Reverse Stand-off Voltage	Reverse Current	Breakdown Voltage		Clamping Voltage	Reverse Peak Pulse Current	Peak Power Dissipation	Capacitance		
		V_{RWM}	I_R at V_{RWM}	V_{BR}	at I_T	V_C at Max. I_{PP}	I_{PP}	$P_{PK}(W)$ 8X20 μs	C_j	at f	at V_R
		Max. (V)	Max. (μA)	Min. (V)	(mA)	Max. (V)	Max. (A)	Typ	Typ. (pF)	(MHz)	(V)
ESD9P3V3	XA	3.3	2.5	5	1	10.4	9.8	102	80	1	0
ESD9P5V0	XB	5	1	6.2	1	12.3	8.7	107	65	1	0
ESD9P12	XC	12	1	13.5	1	23.7	5.9	140	30	1	0

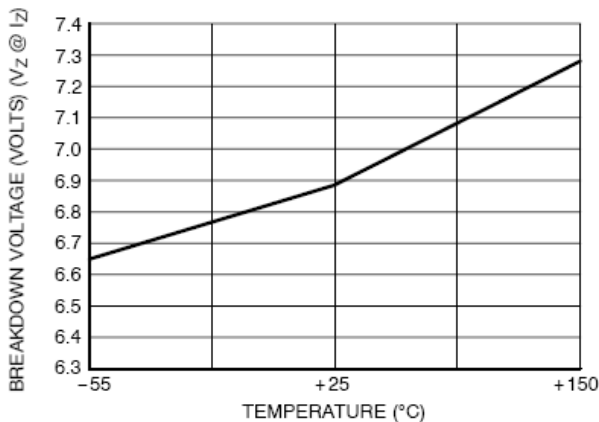


Figure 1. Typical Breakdown Voltage versus Temperature

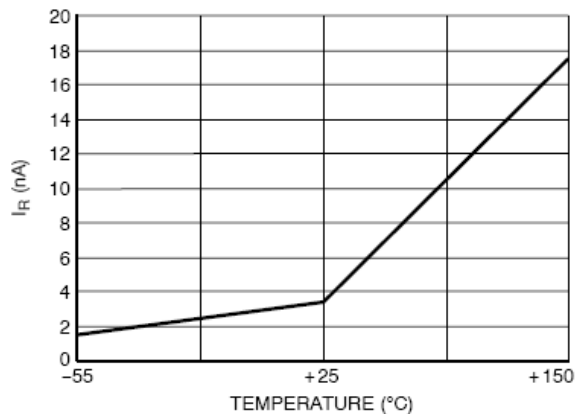


Figure 2. Typical Leakage Current versus Temperature

TOP DYNAMIC



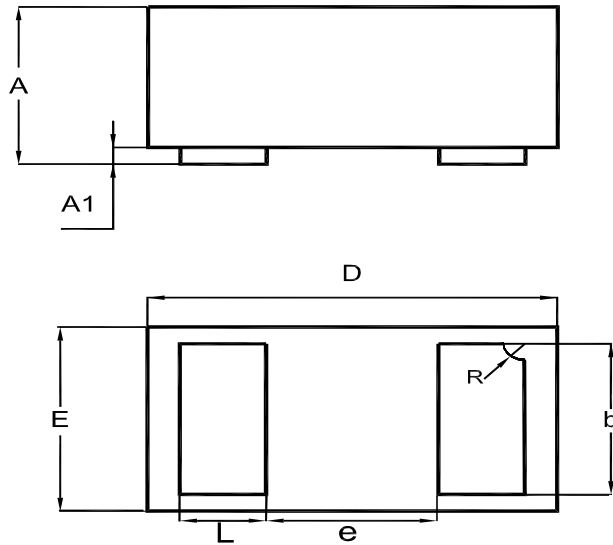
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PACKAGE OUTLINE

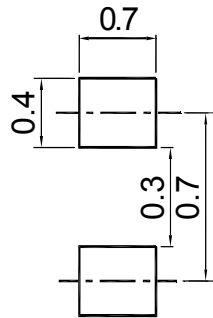
Plastic surface mounted package

DFN1006-2H



UNIT	A	A1	b	D	E	e	L	R
mm	0.51 0.46	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	
DFN1006-2H	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

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