

E3V3SBPA1A-HAF

ESD Protection Diode

Features

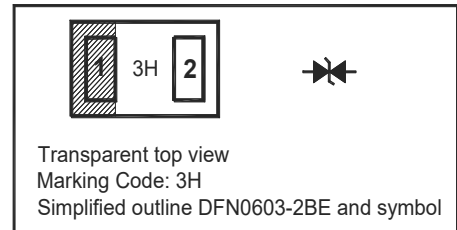
- Low leakage current
- Halogen and Antimony Free(HAF),
RoHS compliant

Applications

- Cellular Handsets & Accessories
- Keypads, Side Keys, Audio Ports
- Portable Instrumentation
- Notebook Computers
- Tablet PC

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



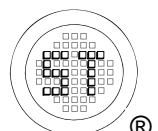
Absolute Maximum Ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs)	P _{PK}	60	W
Peak Pulse Current (tp = 8/20 μs)	I _{PP}	6	A
ESD Discharge (IEC61000-4-2) Air Contact	V _{ESD}	± 30 ± 30	KV
Operation Temperature Range	T _j	- 40 to + 125	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

Characteristics at T_a = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Working Voltage	V _{RWM}	-	-	3.3	V
Reverse Breakdown Voltage at I _R = 1 mA	V _{BR}	4	-	6.8	V
Reverse Current at V _{RWM} = 3.3 V	I _R	-	-	350	nA
Clamping Voltage at I _{PP} = 6 A , tp = 8/20 μs	V _C	-	-	10	V
ESD Clamping Voltage at I _{TLP} = 4 A, tp = 0.2/100 ns at I _{TLP} = 16 A, tp = 0.2/100 ns	V _C	- -	6.2 7.2	- -	V
Dynamic Resistance ¹⁾	R _{dyn}	-	0.08	-	Ω
Junction Capacitance at V _R = 0 V, f = 1 MHz	C _j	-	15	20	pF

¹⁾ Dynamic Resistance calculated from I_{TLP} = 4A to I_{TLP} = 16 A .



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Electrical characteristic curves

Fig 1. Pulse Waveform

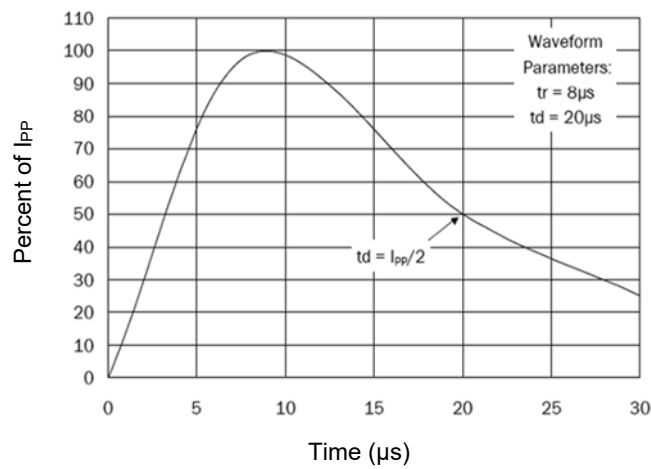


Fig 2. Power Derating Curve

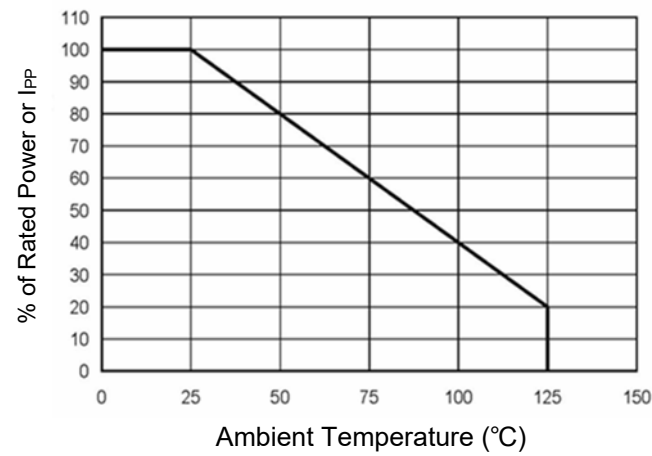
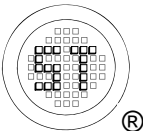
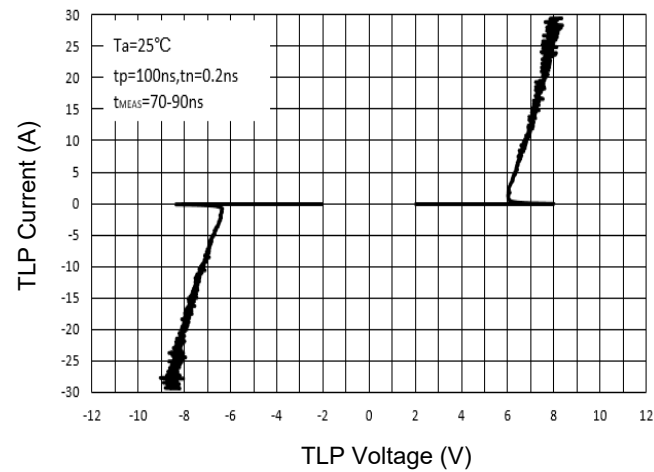


Fig 3. TLP Curve



Electrical characteristic curves

Fig 4. Clamping Voltage Curve (Pin 1 to Pin 2)

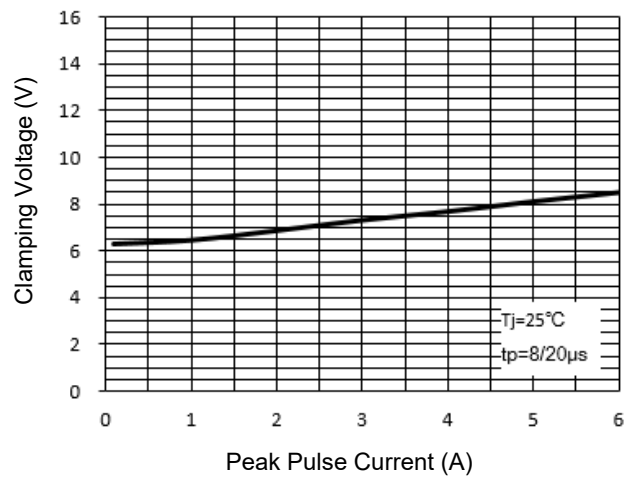


Fig 5. Junction Capacitance (Pin 1 to Pin 2)

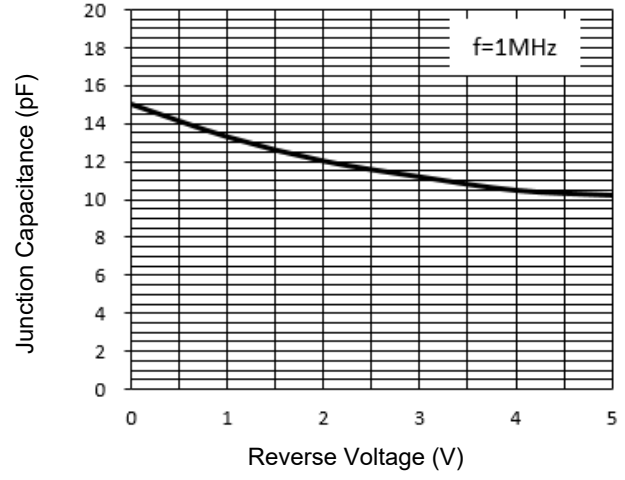


Fig 6. Clamping Voltage Curve (Pin 2 to Pin 1)

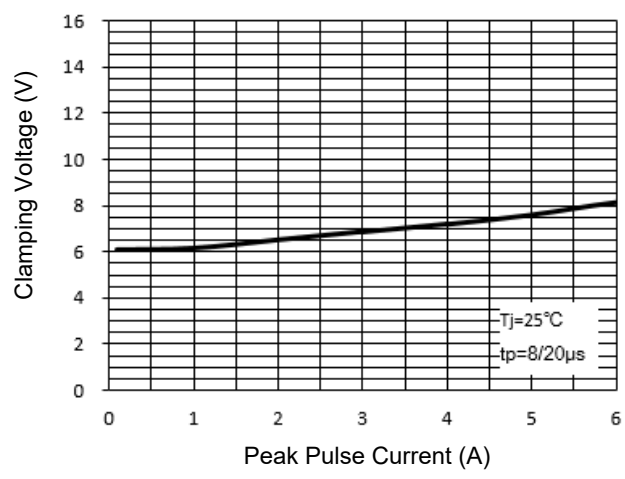
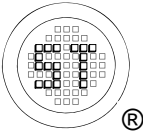
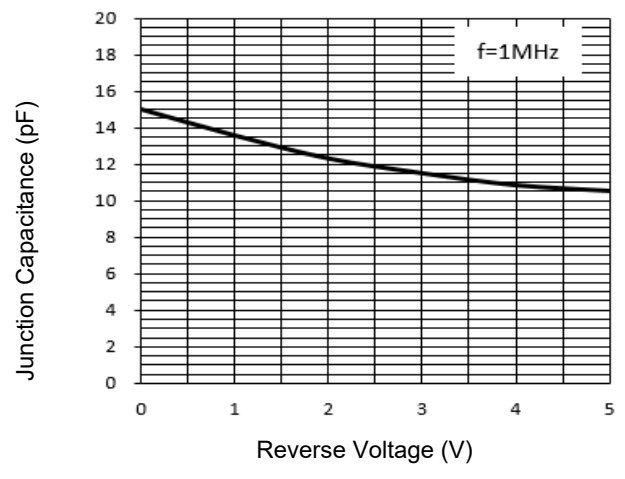


Fig 7. Junction Capacitance (Pin 2 to Pin 1)

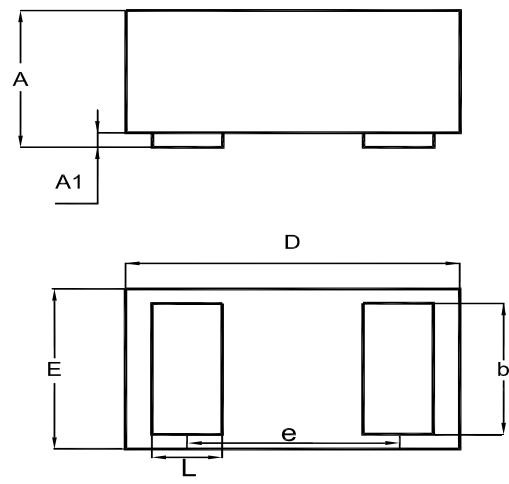


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PACKAGE OUTLINE

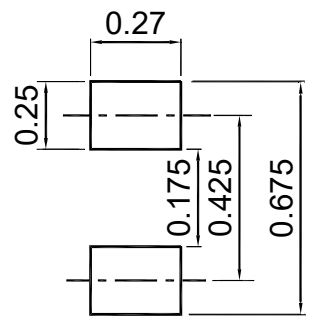
Plastic surface mounted package; 2 leads

DFN0603-2BE



UNIT	A	A1	b	D	E	e	L
mm	0.24 0.3	0 0.025	0.21 0.29	0.57 0.65	0.28 0.35	0.355	0.14 0.22

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN0603-2BE	8	4 ± 0.1	0.157 ± 0.004	178	7	10,000

Marking information

" • " = HAF (Halogen and Antimony Free)

" 3H " = Part No.

Font type: Arial

