

# E5V0VUPA1CR-AH

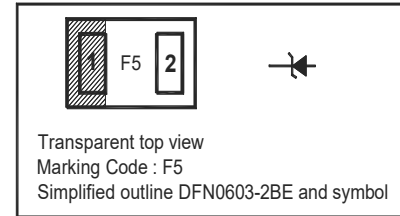
## ESD Protection Diode

### Features

- Low clamping voltage
- Low operating voltage
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF),  
RoHS compliant

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



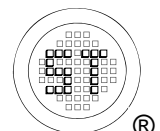
### Absolute Maximum Ratings (at $T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	35	W
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	4	A
IEC61000-4-2 (ESD) Air Contact	$V_{ESD}$	$\pm 18$ $\pm 18$	KV
Operating Temperature Range	$T_j$	- 55 to + 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 $I_R = 5 \text{ mA}$	$V_{(BR)R}$	6	-	9.5	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	$I_R$	-	-	0.5	$\mu\text{A}$
Clamping Voltage at $I_{PP} = 4 \text{ A}$ , $t_p = 8/20 \mu\text{s}$	$V_C$	-	-	8.5	V
Clamping voltage <sup>1)</sup> at $I_{PP} = 16 \text{ A}$ , $t_p = 100\text{ns}$	$V_{CL}$	-	12.3	-	V
Dynamic resistance <sup>1)</sup>	$R_{DYN}$	-	0.58	-	$\Omega$
Junction Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_j$	-	-	0.5	pF

<sup>1)</sup> TLP parameter:  $Z_0 = 50 \Omega$ ,  $t_p = 100\text{ns}$ ,  $t_r = 2\text{ns}$ , averaging window from 60ns to 80ns. RDYN is calculated from 4A to 16A.



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## Electrical characteristic curves

Fig 1. Pulse Waveform

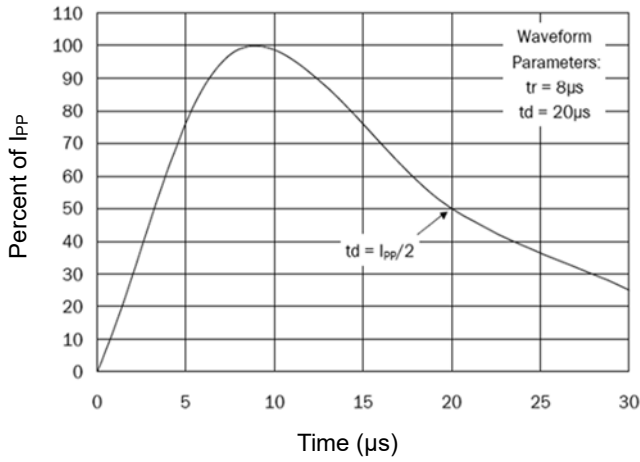


Fig 2. Power Derating Curve

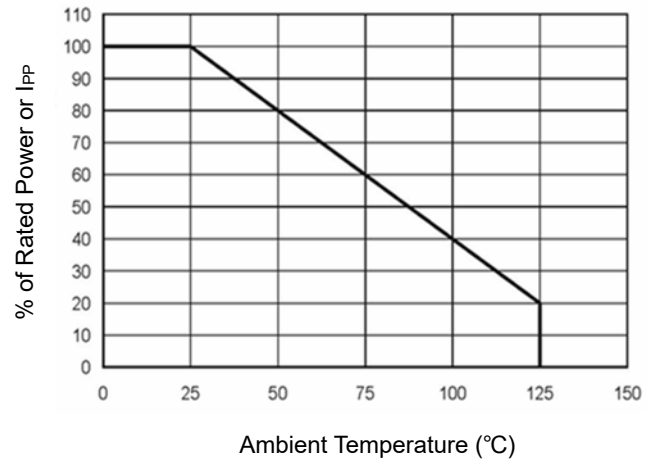


Fig 3. Clamping Voltage Curve

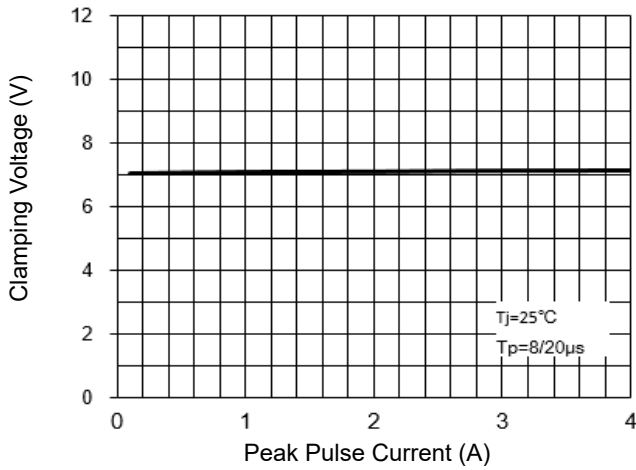


Fig 4. Junction Capacitance

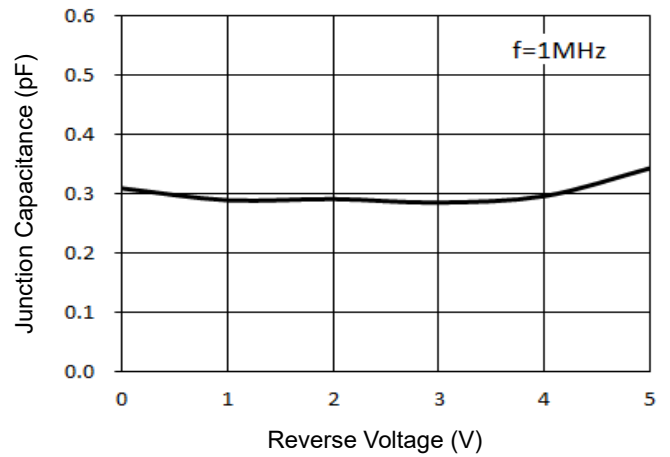
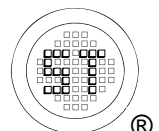
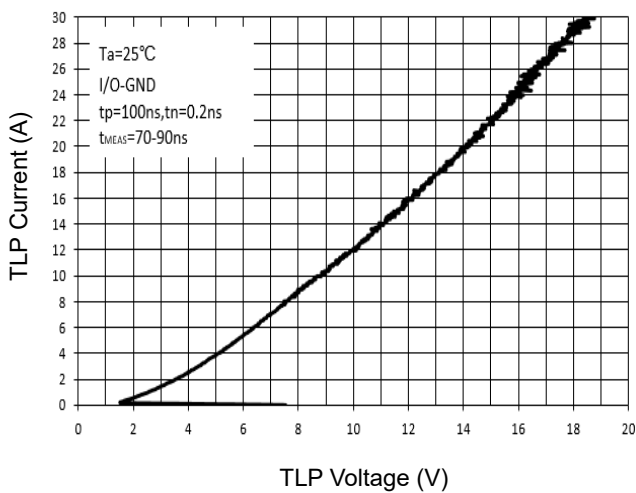


Fig 5. TLP Curve

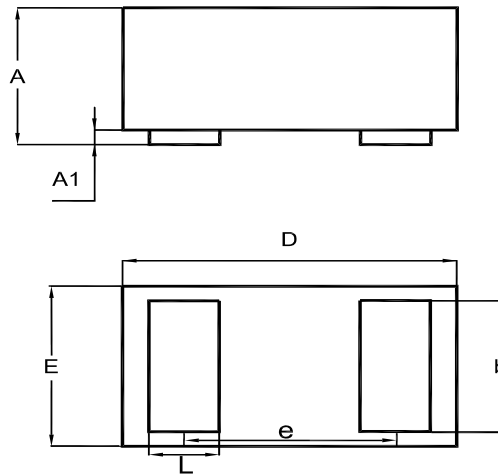


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## PACKAGE OUTLINE

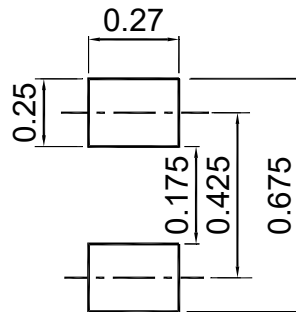
Plastic surface mounted package; 2 leads

DFN0603-2BE



UNIT	A	A1	b	D	E	e	L
mm	0.24	0	0.21	0.57	0.28	0.355	0.14
	0.3	0.025	0.29	0.65	0.35		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	2 ± 0.1	0.079 ± 0.004	178	7	10,000

### Marking information

" • " = HAF (Halogen and Antimony Free)

" F5 " = Part No.

Font type: Arial

