

# BRES5V0X1B2ZPQ

Rev.A Oct.-2025



蓝箭电子  
BLUE ROCKET ELECTRONICS

DATA SHEET

DFN1006-2L

ESD

DFN1006-2L Plastic Package 1-Line,Bi-directional , ESD Protection Diode.

1ns

20KV

IEC61000-4-2

4

ESD

AEC-Q101

Ultra small package, Response Time is Typically < 1 ns, ESD > 20 kV per Human Body Model,IEC61000-4-2 Level 4 ESD Protection, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

MP3

Suitable for cellular phones audio,MP3 players, Digi

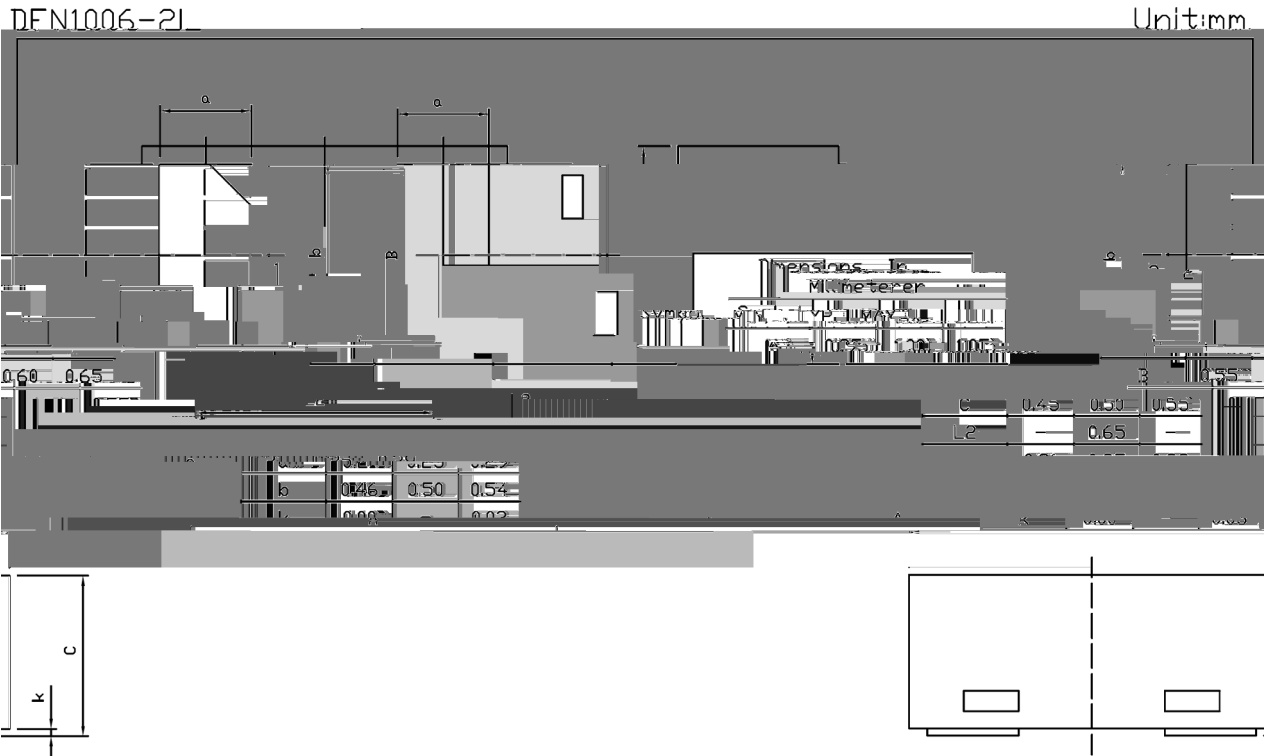
| Parameter                                       | Symbol    | Rating   | Unit |
|-------------------------------------------------|-----------|----------|------|
| Peak Pulse Power( $t_p = 8/20\text{ s}$ )       | $P_{PK}$  | 56       | W    |
| Peak Pulse Current( $t_p = 8/20\text{ s}$ )     | $I_{PP}$  | 4        | A    |
| ESD according to IEC61000-4-2 air discharge     | $V_{ESD}$ | $\pm 20$ | KV   |
| ESD according to IEC61000-4-2 contact discharge |           | $\pm 20$ |      |
| Junction temperature                            | $T_J$     | 125      |      |
| Storage Temperature                             | $T_{STG}$ | -55~+150 |      |

Definitions of electrical characteristics

| Parameter | Symbol   | Test Conditions  | Min | Typ | Max | Unit |
|-----------|----------|------------------|-----|-----|-----|------|
|           | $R_{WM}$ |                  |     |     | 5.0 | V    |
|           | $R$      | $V_{RWM} = 5.0V$ |     |     | 100 | nA   |
|           | $V_{BR}$ | $I_T=1mA$        | nA  | 6.0 |     |      |

**BRES**D5V0X1B2Z**PQ**

/ Package Dimensions



Rev.01 202108

**BRES**D5V0X1B2Z**PQ**


**( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)**

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|  |

Note:

- |   |       |     |           |                                         |                                        |
|---|-------|-----|-----------|-----------------------------------------|----------------------------------------|
| 1 | 150   | 200 | 60        | 120sec;                                 | 1.Preheating:150~200 , Time:60~120sec. |
| 2 | 255±5 |     | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |                                        |
| 3 |       | 2   | 10 /sec.  | 3. Cooling Speed: 2~10 /sec.            |                                        |

**/ Resistance to Soldering Heat Test Conditions**

|       |           |             |               |
|-------|-----------|-------------|---------------|
| 260±5 | 10±1 sec. | Temp.:260±5 | Time:10±1 sec |
|-------|-----------|-------------|---------------|

**/ Packaging SPEC.**

/ REEL

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |           |           |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|-----------|-----------|
|              | Units/Reel<br>/ | Reels/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Reel                              | Inner Box | Outer Box |