

## / Descriptions

DFN1006-2L ESD

DFN1006-2L Plastic Package ESD Protection Diode.

## / Features

1ns

30KV

IEC61000-4-2

4

ESD

AEC-Q101

Ultra small package, Response Time is Typically < 1 ns, ESD > 30 kV per Human Body Model, IEC61000-4-2 Level 4 ESD Protection, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

## / Applications

MP3

Suitable for cellular phones audio, MP3 players, Digital cameras, Portable devices, mobile telephone and other users, Meet the stringent requirements of automotive applications.

## / Equivalent Circuit



## / Pinning



## / Marking

See Marking Instructions.

## / Absolute Maximum Ratings

| Parameter                                       | Symbol    | Rating   | Unit |
|-------------------------------------------------|-----------|----------|------|
| Peak pulse power ( $t_p = 8/20\mu s$ )          | $P_K$     | 69       | W    |
| Peak pulse current ( $t_p = 8/20\mu s$ )        | $I_{PP}$  | 5.5      | A    |
| ESD according to IEC61000-4-2 air discharge     | $V_{ESD}$ | $\pm 30$ | KV   |
| ESD according to IEC61000-4-2 contact discharge |           | $\pm 30$ |      |
| Junction temperature                            | $T_J$     | 150      |      |
| Storage temperature                             | $T_{STG}$ | -55~+150 |      |

/ Electrical Characteristics( $T_a=25^\circ C$ )

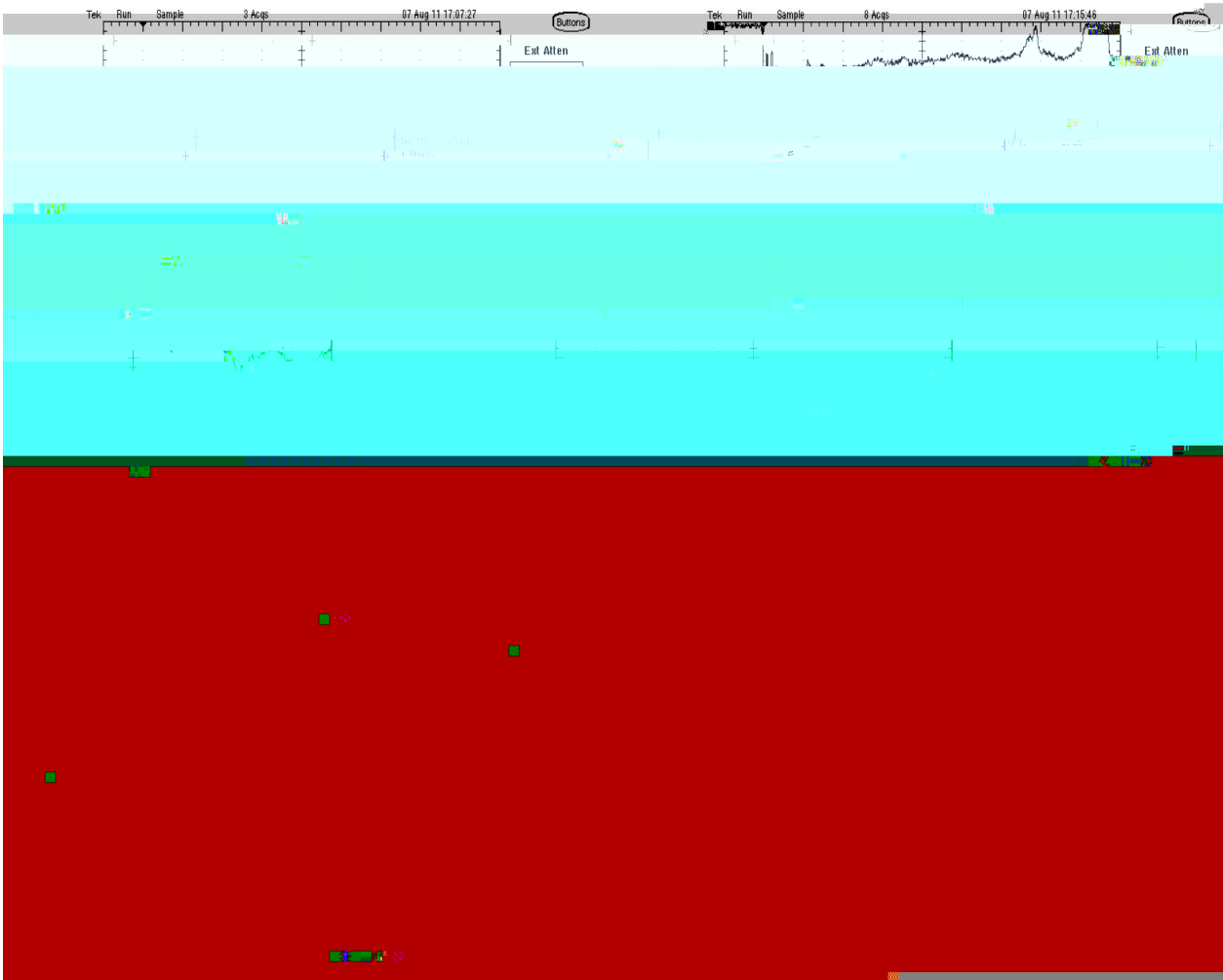
| Parameter                               | Symbol    | Test Conditions                       | Min | Typ | Max       | Unit    |
|-----------------------------------------|-----------|---------------------------------------|-----|-----|-----------|---------|
| Reverse maximum working voltage         | $V_{RWM}$ |                                       |     |     | 3.3       | V       |
| Reverse leakage current                 | $I_R$     | $V_{RWM} = \pm 3.3V$                  |     |     | $\pm 0.1$ | $\mu A$ |
| Reverse breakdown voltage <sup>1)</sup> | $V_{BR}$  | $I_T = 1mA$                           | 5.0 |     | 6.8       | V       |
| Clamping voltage <sup>2)</sup>          | $V_C$     | $I_{PP} = 1A \quad t_p = 8/20\mu s$   |     |     | 9.8       | V       |
|                                         |           | $I_{PP} = 5.5A \quad t_p = 8/20\mu s$ |     |     | 12.5      | V       |
| Junction capacitance                    | $C_J$     | $V_R = 0V \quad f = 1MHz$             |     |     | 15        | pF      |

Notes:

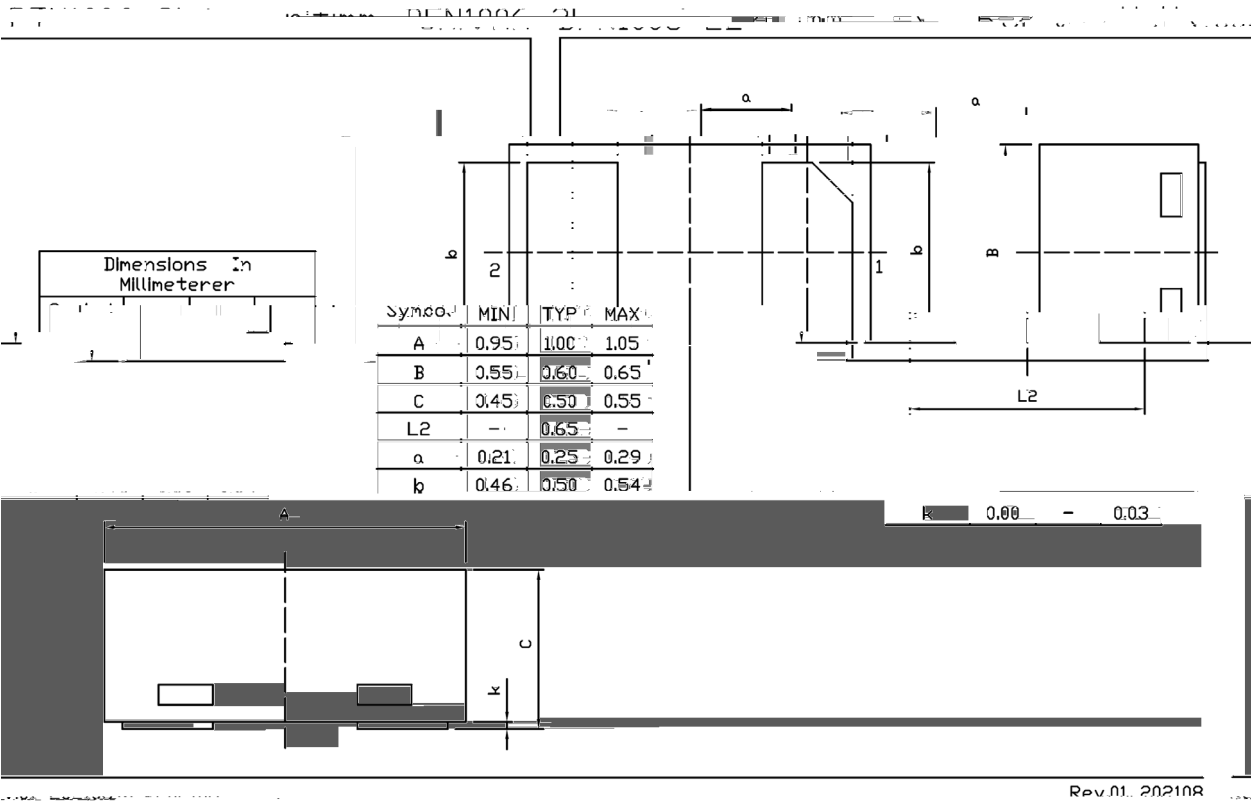
1)  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of  $25^\circ C$ .

2) Non-repetitive current pulse, according to IEC61000-4-5.

/ Electrical Characteristic Curve



/ Package Dimensions





**/ Marking Instructions**



Q

3A

Note

Q            Automobile halogen-free product Code

3A          Product Type

# BRES3V3L1B2ZPQ

Rev.A May.-2023



**蓝箭电子**  
BLUE ROCKET ELECTRONICS

DATA SHEET