

/ Absolute Maximum Ratings(Ta=25)

| Parameter | Symbol | Rating | Unit |
|---|-----------|----------|-------------|
| Peak pulse power ($t_p = 8/20$ s) | P_K | 420 | W |
| Peak pulse current ($t_p = 8/20$ s) | I_{PP} | 7 | A |
| ESD according to IEC61000-4-2 air discharge | V_{ESD} | ± 30 | KV |
| ESD according to IEC61000-4-2 contact discharge | | ± 30 | |
| Junction temperature | T_J | 125 | $^{\circ}C$ |
| Storage temperature | T_{STG} | -55~+150 | |

/ Electrical Characteristics(Ta=25)

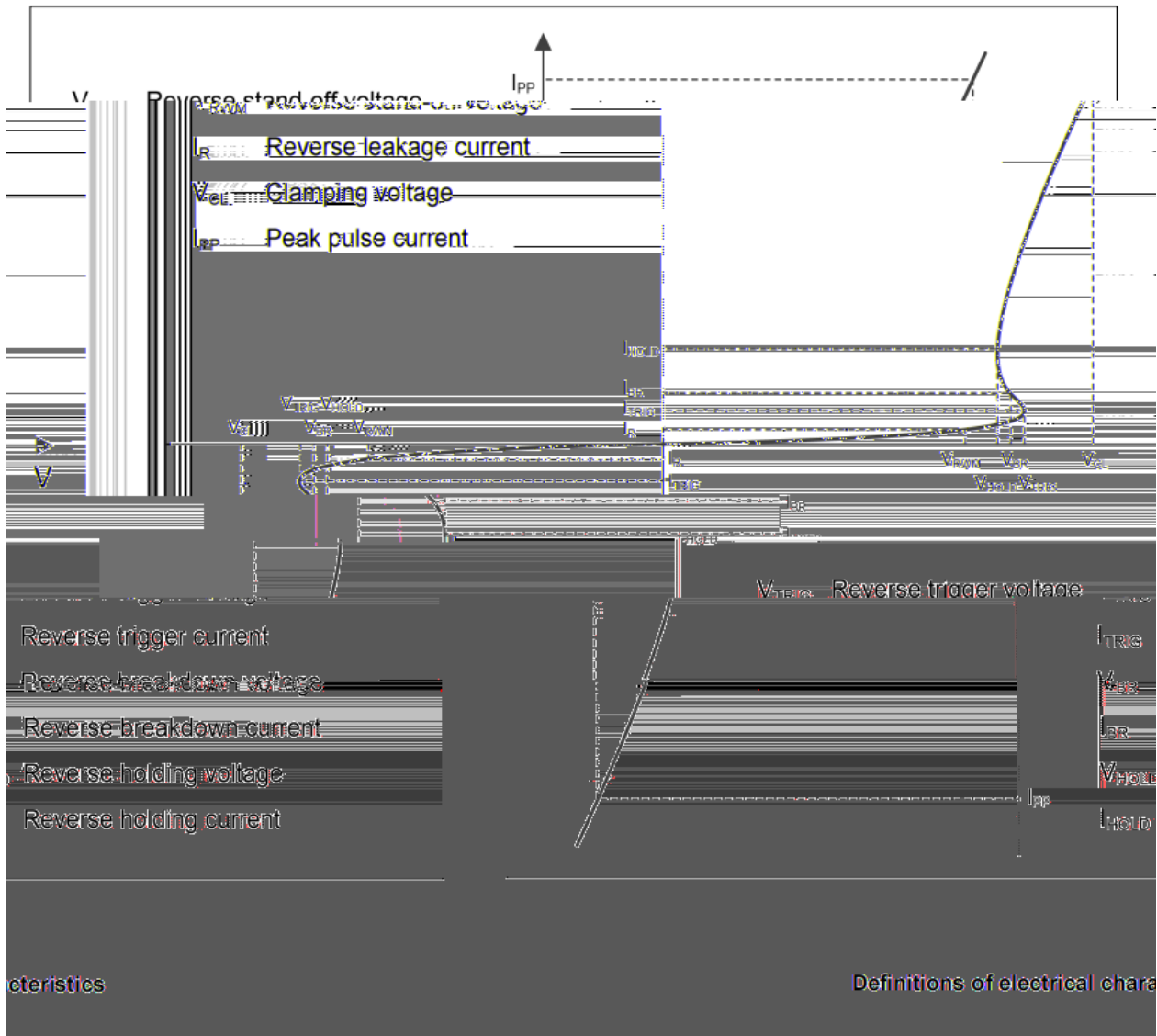
| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|-----------|------------------------------|-----|------|----------|------|
| Reverse maximum working voltage | V_{RWM} | | | | ± 36 | V |
| Reverse leakage current | I_R | $V_{RWM} = \pm 36V$ | | | 100 | nA |
| Reverse breakdown voltage ¹⁾ | V_{BR} | $I_T = 1mA$ | 36 | | | V |
| Clamping voltage ²⁾ | V_C | $I_{PP} = 1A$ $t_p = 8/20$ s | | 46 | 48 | V |
| | | $I_{PP} = 7A$ $t_p = 8/20$ s | | 75 | 77 | V |
| | | $V_{ESD}=8KV$ ³⁾ | | 65 | | V |
| Junction capacitance | C_J | $V_R = 0V$ $f = 1MHz$ | | 15 | 20 | pF |
| Clamping voltage ⁴⁾ | V_{CL} | $I_{PP} = 16A$ $t_p = 100ns$ | | 60 | | V |
| Dynamic resistance ⁴⁾ | R_{DYN} | | | 0.22 | | |

Notes:

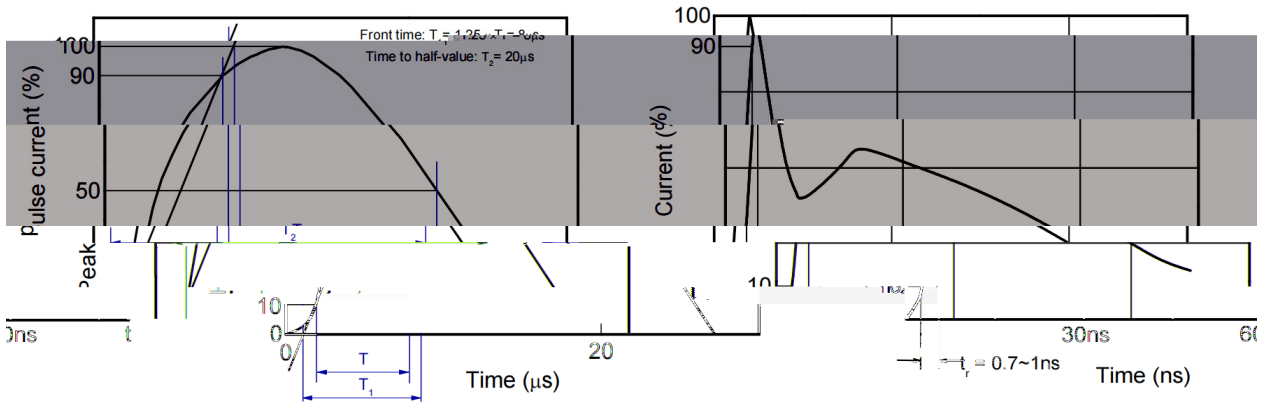
- 1) V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25 .
- 2) Non-repetitive current pulse, according to IEC61000-4-5.
- 3) Contact discharge mode, according to IEC61000-4-2.
- 4)TLP parameter: $Z_0 = 50$, $t_p = 100ns$, $t_r = 2ns$, averaging window from 60ns to 80ns. R_{DYN} is calculated from 4A to 16A.

BRESD36VL1B2ZP

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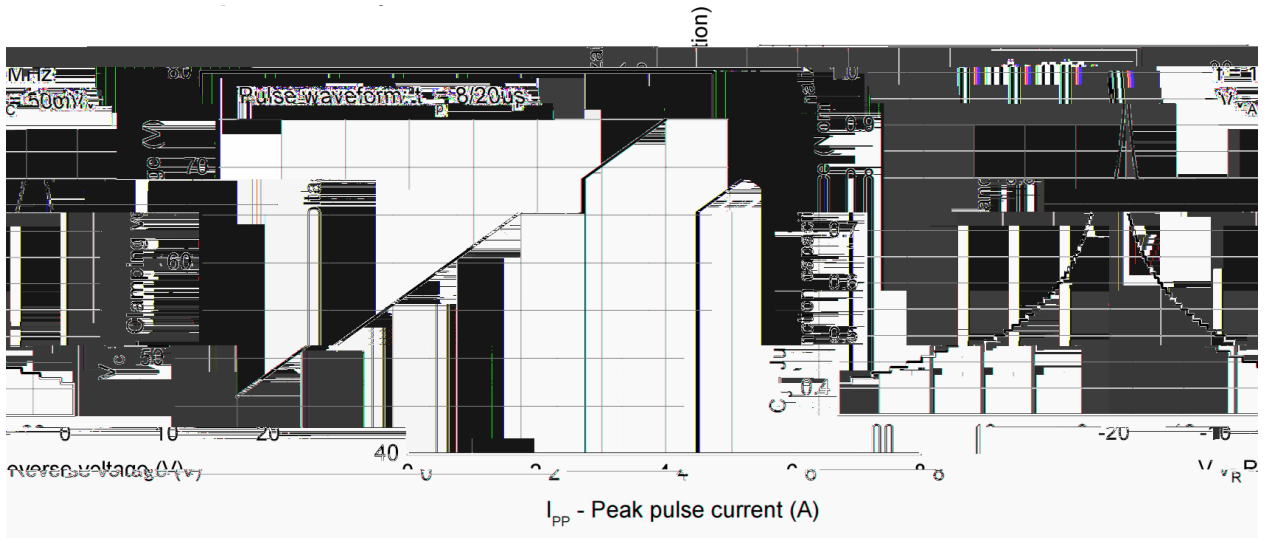
/ Electrical Characteristic Curve



per IEC61000-4-2

8/20μs waveform per IEC61000-4-5

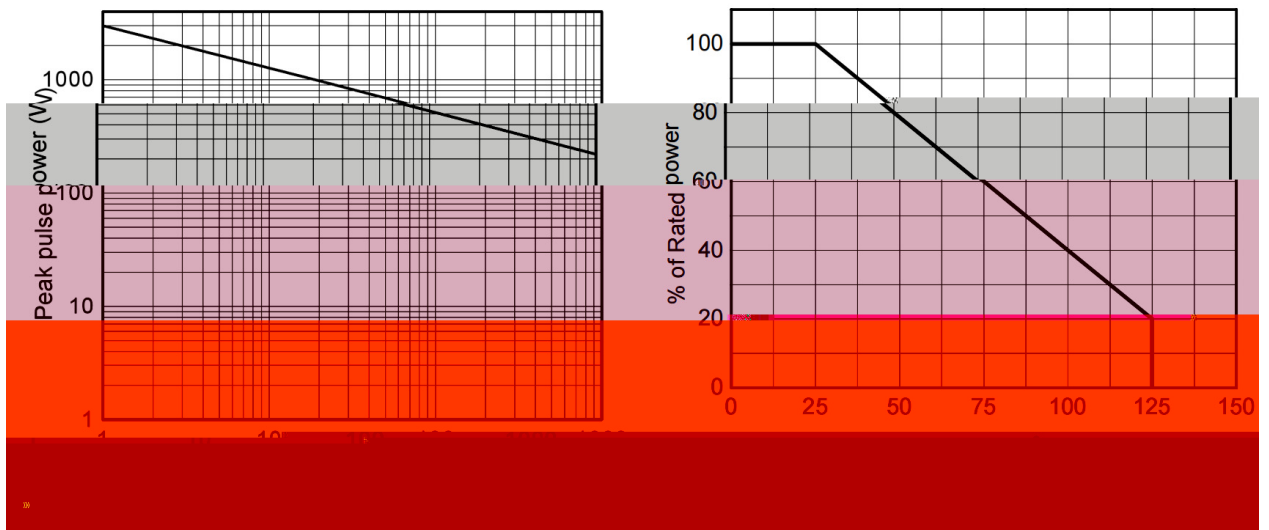
Contact discharge current waveform



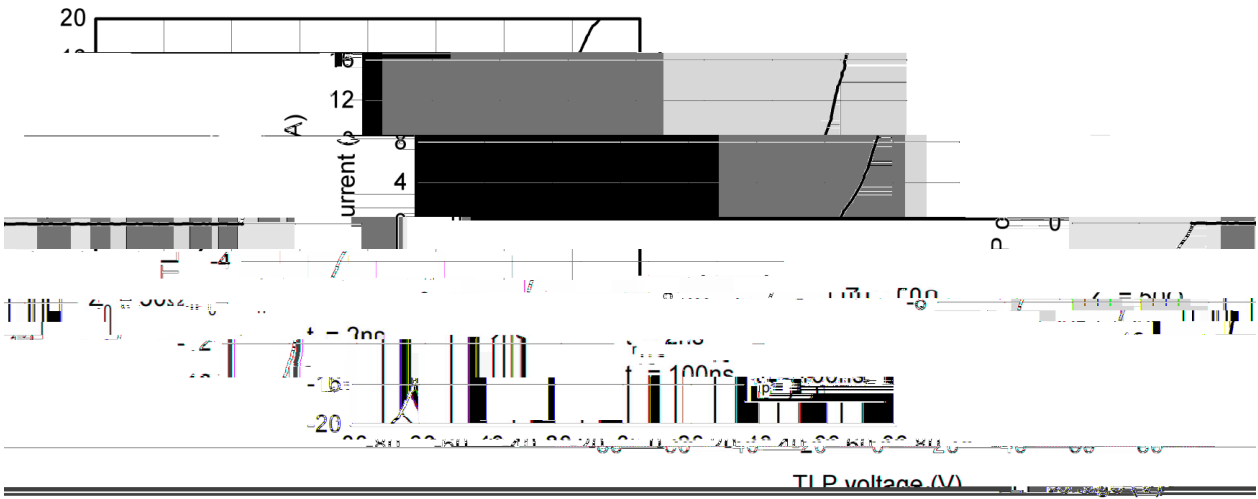
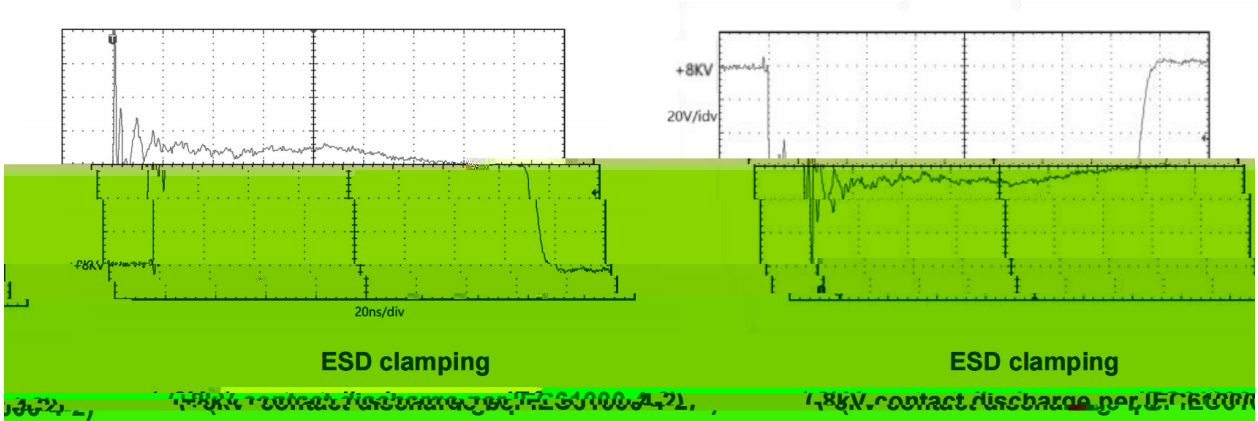
Reverse voltage vs. Peak pulse current

Clamping voltage vs. Peak pulse current

Capacitance vs. Peak pulse current



/ Electrical Characteristic Curve



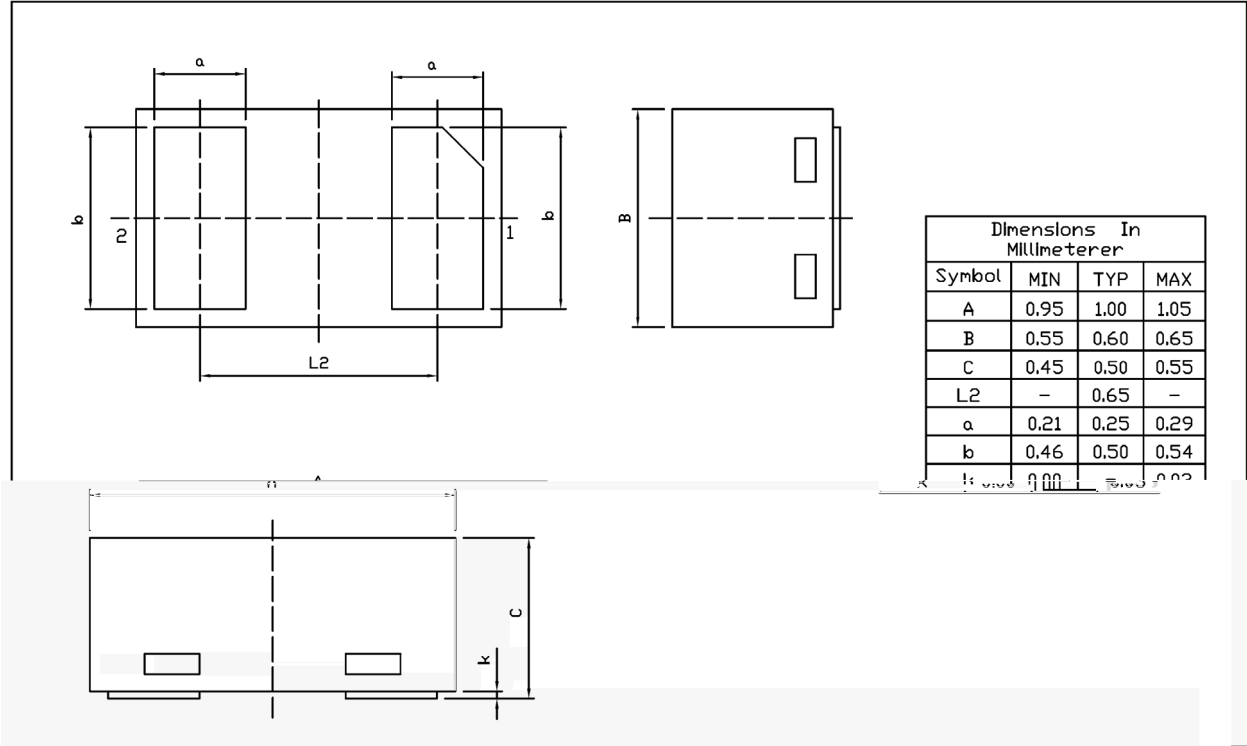
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/ Package Dimensions

DFN1006-2L

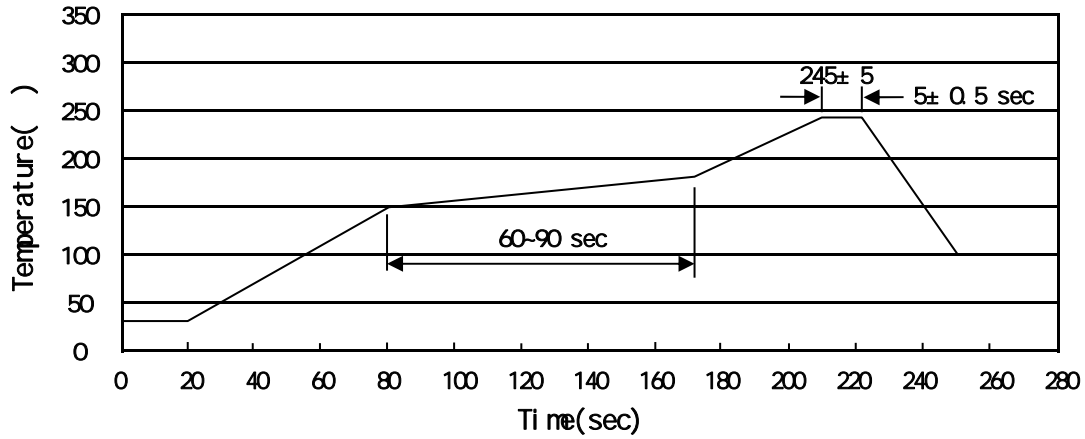
Unit:mm



Rev.01 202108



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



Note:

- | | | | | | |
|---|-------|-----|-------|----------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 2.Peak Temp.:245±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 ³) | | |
|--------------|--------|----|---------|---|---------|-----------------------------------|-------------|-------------|
| | 10,000 | 10 | 100,000 | 6 | 600,000 | 7" x8 | 180x120x180 | 390x385x205 |
| DFN1006-2L | 10,000 | 10 | 100,000 | 6 | 600,000 | 7" x8 | 180x120x180 | 390x385x205 |

/ Notices