

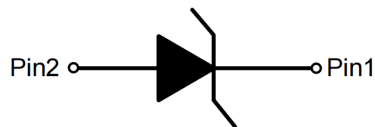
DFN1610-2L ESD  
 DFN1610-2L Plastic Package 1-Line,Uni-directional , ESD Protection Diode.

1ns 30KV IEC61000-4-2 4 ESD

Ultra small package, Response Time is Typically < 1 ns, ESD > 30 kV per Human Body Model,IEC61000-4-2 Level 4 ESD Protection,HF Product.

MP3

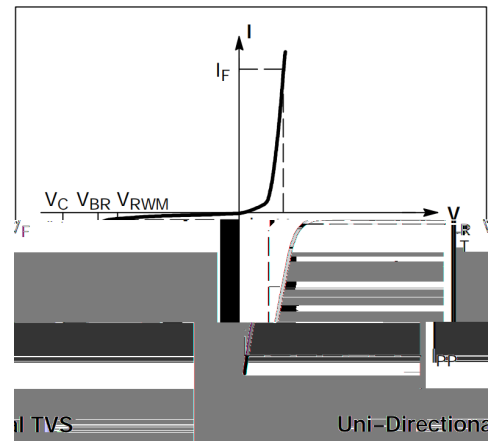
Suitable for cellular phones audio,MP3 players, Digital cameras, Portable devices, mobile telephone and other users.



See Marking Instructions.

| Parameter                                       | Symbol    | Rating   | Unit |
|-------------------------------------------------|-----------|----------|------|
| Peak Pulse Current( $t_p = 8/20\mu s$ )         | $I_{PP}$  | 80       | 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                            | $T_J$     | 125      |      |
| Storage Temperature                             | $T_{STG}$ | -55~+150 |      |

| Symbol    | Parameter                           |
|-----------|-------------------------------------|
| $V_{RWM}$ | Peak Reverse Working Voltage        |
| $I_R$     | Reverse Leakage Current @ $V_{RWM}$ |
| $V_{BR}$  | Reverse Breakdown Voltage @ $I_T$   |
| $V_{CL}$  | Clamping Voltage @ $I_{PP}$         |
| $P_{PP}$  | Peak Pulse Power                    |
| $C_J$     | Junction Capacitance                |
| $I_F$     | Forward Current                     |
| $V_F$     | Forward Voltage @ $I_F$             |

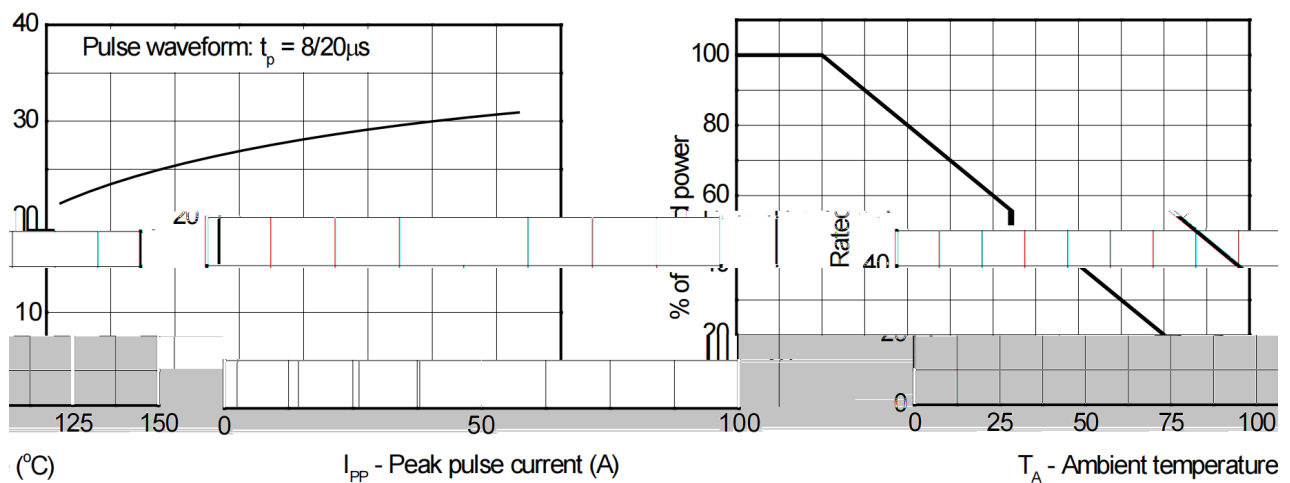
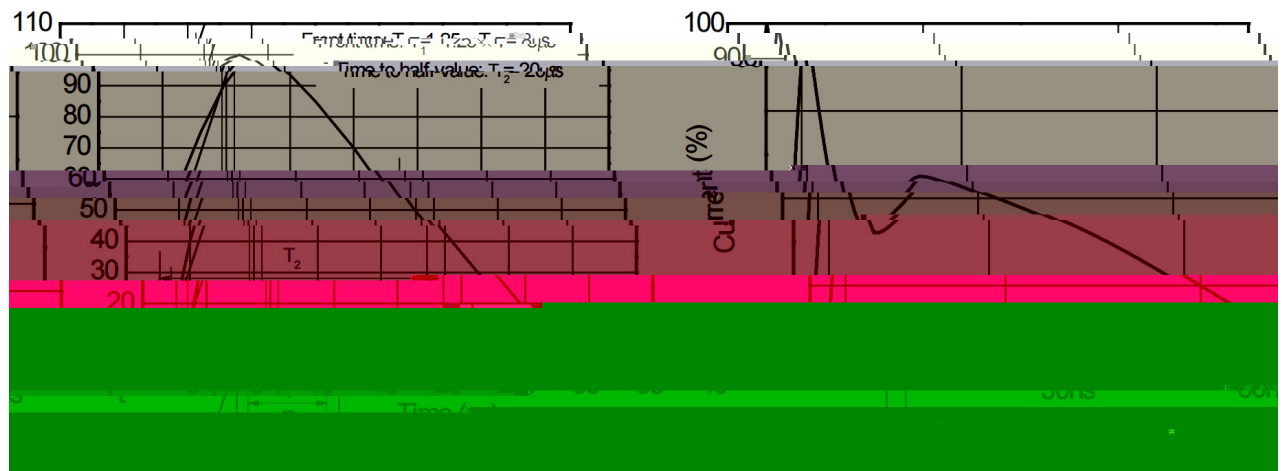


| Parameter                               | Symbol    | Test Conditions                  | Min  | Typ | Max | Unit    |
|-----------------------------------------|-----------|----------------------------------|------|-----|-----|---------|
| Reverse maximum working voltage         | $V_{RWM}$ |                                  |      |     | 24  | V       |
| Reverse leakage current                 | $I_R$     | $V_R = 24V$                      |      |     | 0.5 | $\mu A$ |
| Reverse breakdown voltage <sup>1)</sup> | $V_{BR}$  | $I_T = 1mA$                      | 25.5 |     |     | V       |
| Clamping voltage <sup>2)</sup>          | $V_{CL}$  | $I_{PP} = 80A$ $t_p = 8/20\mu s$ |      | 32  | 34  | V       |
| Junction Capacitance                    | $C_J$     | $V_R = 0V$ $f = 1MHz$            |      | 250 | 600 | pF      |
| Forward Voltage                         | $V_F$     | $I_F = 10mA$                     |      | 0.7 |     | V       |

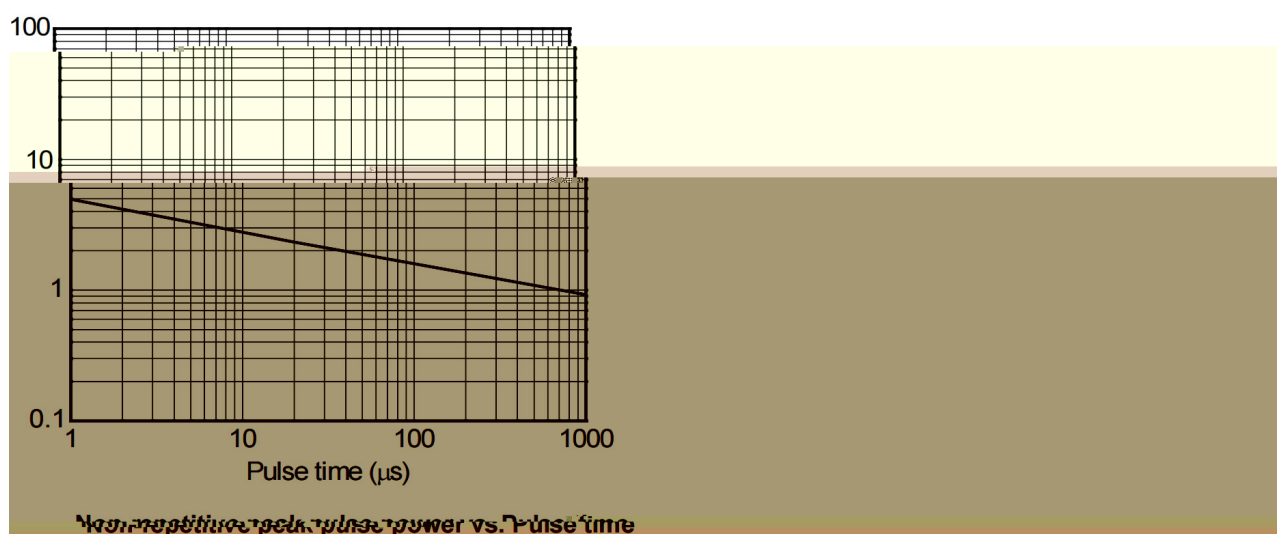
Notes:

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

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

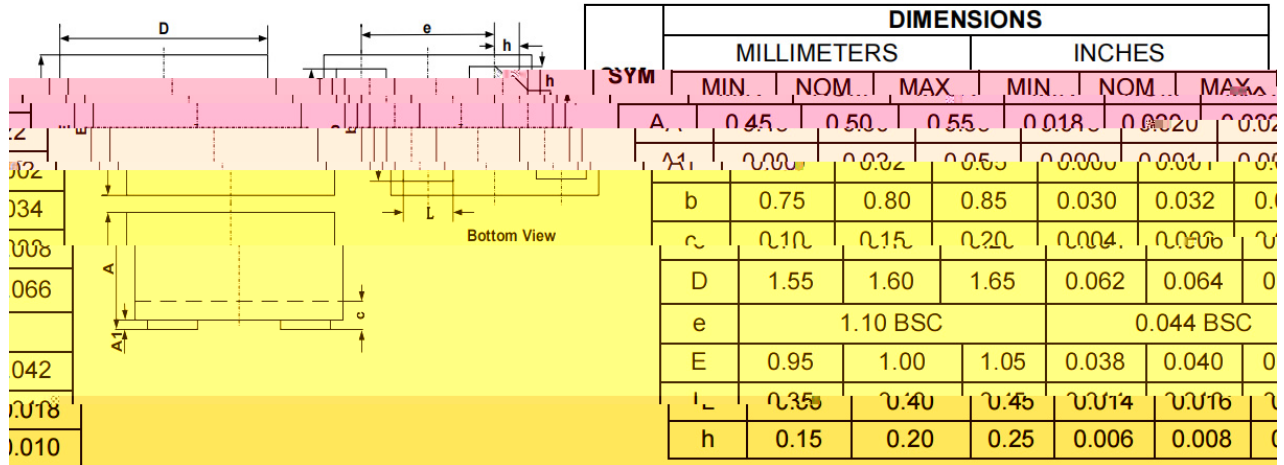


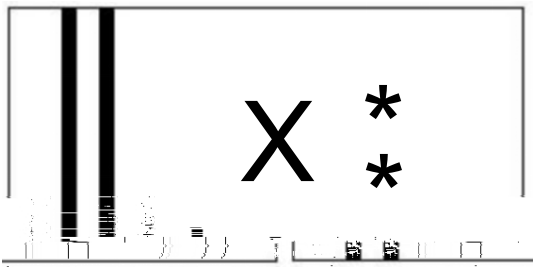
Clamping voltage vs. Peak pulse current Power derating vs. Ambient temperature



Non-repetitive peak pulse power vs. Pulse time

## DFN1610

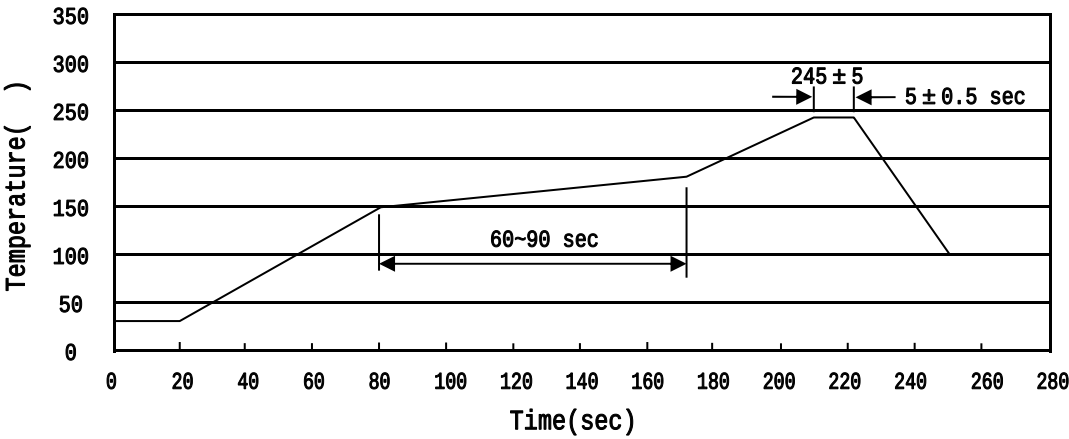




X

Note

|   |                                       |
|---|---------------------------------------|
| X | Product Type Code                     |
| : | Lot No. Code, code change with Lot No |



Note:

- |   |       |     |    |           |                                         |
|---|-------|-----|----|-----------|-----------------------------------------|
| 1 | 150   | 180 | 60 | 90sec;    | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5 |     |    | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       |     | 2  | 10 /sec.  | 3. Cooling Speed: 2~10 /sec.            |

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