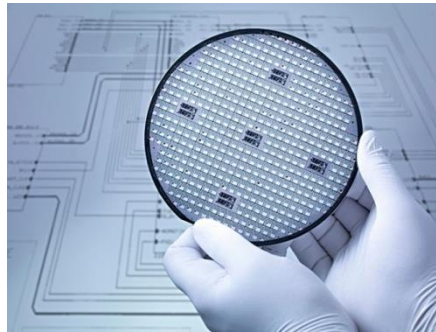




100mil TVS 芯片选型



TVS Diode series



100TVS

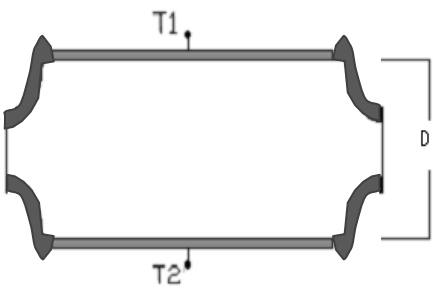
描述

TVS 系列产品是一种专门用来保护敏感电子设备免受雷电或者瞬态电压冲击的器件。

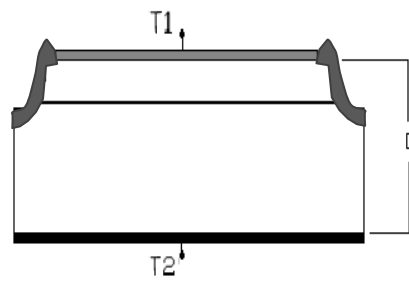
- 低漏电流
- 快速相应速度 (从 0->VBR 响应时间小于 1ps)
- 玻璃钝化结
- 良好的钳位能力
- 承受 1000W 峰值脉冲 (10/1000μs)

芯片结构图

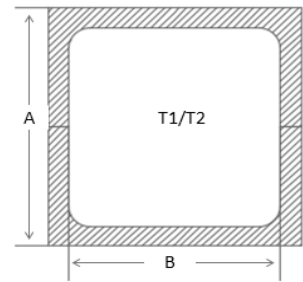
| | | |
|---------------------|-----------------------|-----------|
| 芯片工艺 Wafer tech | 台面玻璃钝化工艺 | |
| 圆片尺寸 Wafer Size | Φ5inch | |
| 芯片厚度 Chip Thickness | D=265±15μm(可根据客户要求定制) | |
| 金属 (T1/T2) Metal | 正面 Front | TiNiAg |
| | 背面 Back | TiNiAg |
| 芯片尺寸 Chip Size | 芯片尺寸(A: μm) Chip | 2540±50 |
| | 电极尺寸(B: μm) Pad | 2245 ± 25 |



(图 1: 双向 TVS 外沟槽结构示意图)



(图 2: 单向 TVS 外沟槽结构示意图)



(图 3: 芯片尺寸示意图)



芯片电参数-TVS (VBR)

| 单向 | 双向 | V _{RWM} | V _{BR} @ I _T | | I _T | V _c @ I _{pp} | I _{pp} | I _R @ V _{RWM} |
|---------------|---------------|------------------|----------------------------------|--------|----------------|----------------------------------|-----------------|-----------------------------------|
| | | (V) | (V)min | (V)max | (mA) | (V) max | (A) min | (μA) max |
| TP0100-P6V8A2 | TP0100-P6V8C1 | 5.8 | 6.45 | 7.14 | 10 | 10.5 | 95.2 | 500 |
| TP0100-P7V5A2 | TP0100-P7V5C1 | 6.4 | 7.13 | 7.88 | 10 | 11.3 | 88.5 | 100 |
| TP0100-P8V2A2 | TP0100-P8V2C1 | 7.02 | 7.79 | 8.61 | 10 | 12.1 | 82.6 | 100 |
| TP0100-P9V1A2 | TP0100-P9V1C1 | 7.8 | 8.65 | 9.55 | 1 | 13.4 | 74.6 | 20 |
| TP0100-P010A2 | TP0100-P010C1 | 8.55 | 9.5 | 10.5 | 1 | 14.5 | 69.0 | 10 |
| TP0100-P011A2 | TP0100-P011C1 | 9.4 | 10.5 | 11.6 | 1 | 15.6 | 64.1 | 5 |
| TP0100-P012A1 | TP0100-P012C1 | 10.2 | 11.4 | 12.6 | 1 | 16.7 | 59.9 | 1 |
| TP0100-P013A1 | TP0100-P013C1 | 11.1 | 12.4 | 13.7 | 1 | 18.2 | 54.9 | 1 |
| TP0100-P015A1 | TP0100-P015C1 | 12.8 | 14.3 | 15.8 | 1 | 21.2 | 47.2 | 1 |
| TP0100-P016A1 | TP0100-P016C1 | 13.6 | 15.2 | 16.8 | 1 | 22.5 | 44.4 | 1 |
| TP0100-P018A1 | TP0100-P018C1 | 15.3 | 17.1 | 18.9 | 1 | 25.2 | 39.2 | 1 |
| TP0100-P020A1 | TP0100-P020C1 | 17.1 | 19 | 21 | 1 | 27.7 | 36.1 | 1 |
| TP0100-P022A1 | TP0100-P022C3 | 18.8 | 20.9 | 23.1 | 1 | 30.6 | 32.7 | 1 |
| TP0100-P024A1 | TN0100-P024C3 | 20.5 | 22.8 | 25.2 | 1 | 33.2 | 30.1 | 1 |
| TP0100-P027A1 | TN0100-P027C3 | 23.1 | 25.7 | 28.4 | 1 | 37.5 | 26.7 | 1 |
| TP0100-P030A1 | TN0100-P030C3 | 25.6 | 28.5 | 31.5 | 1 | 41.4 | 24.2 | 1 |
| TP0100-P033A1 | TN0100-P033C3 | 28.2 | 31.4 | 34.7 | 1 | 45.7 | 21.9 | 1 |
| TP0100-P036A1 | TN0100-P036C3 | 30.8 | 34.2 | 37.8 | 1 | 49.9 | 20.0 | 1 |
| TP0100-P039A1 | TN0100-P039C3 | 33.3 | 37.1 | 41 | 1 | 53.9 | 18.6 | 1 |
| TP0100-P043A1 | TN0100-P043C3 | 36.8 | 40.9 | 45.2 | 1 | 59.3 | 16.9 | 1 |
| TP0100-P047A1 | TN0100-P047C3 | 40.2 | 44.7 | 49.4 | 1 | 64.8 | 15.4 | 1 |
| TP0100-P051A1 | TN0100-P051C3 | 43.6 | 48.5 | 53.6 | 1 | 70.1 | 14.3 | 1 |
| TP0100-P056A1 | TN0100-P056C3 | 47.8 | 53.2 | 58.8 | 1 | 77 | 13.0 | 1 |
| TP0100-P062A1 | TN0100-P062C3 | 53 | 58.9 | 65.1 | 1 | 85 | 11.8 | 1 |
| TP0100-P068A1 | TN0100-P068C3 | 58.1 | 64.6 | 71.4 | 1 | 92 | 10.9 | 1 |
| TP0100-P075A1 | TN0100-P075C3 | 64.1 | 71.3 | 80.8 | 1 | 103 | 9.7 | 1 |
| TN0100-P082A1 | TN0100-P082C3 | 70.1 | 77.9 | 86.1 | 1 | 113 | 8.8 | 1 |
| TN0100-P091A1 | TN0100-P091C3 | 77.8 | 86.5 | 95.5 | 1 | 125 | 8.0 | 1 |
| TN0100-P100A1 | TN0100-P100C3 | 85.5 | 95 | 105 | 1 | 137 | 7.3 | 1 |