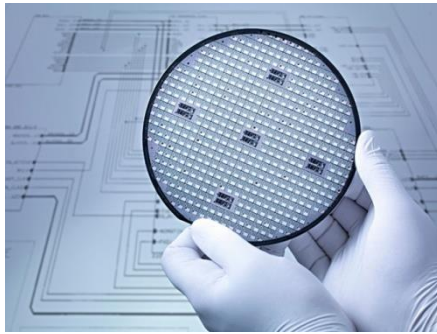


## 022Lmil TVS 芯片选型



## TVS Diode series



## 022LTVS

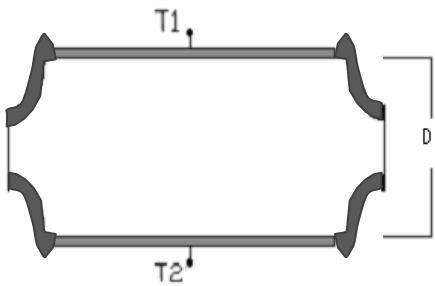
### 描述

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。

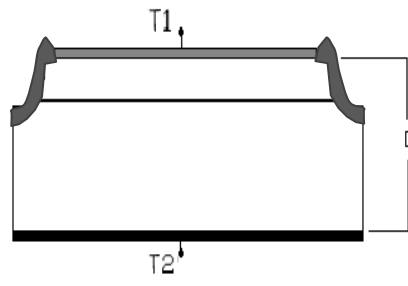
- 低漏电流
- 快速相应速度 (从 0->VBR 响应时间小于 1ps)
- 玻璃钝化结
- 良好的钳位能力
- 承受 5000W 峰值脉冲 (10/1000 $\mu$ s)

### 芯片结构图

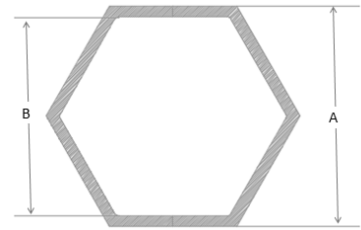
芯片工艺 Wafer tech	台面玻璃钝化工艺	
圆片尺寸 Wafer Size	$\Phi$ 5inch	
芯片厚度 Chip Thickness	D=265 $\pm$ 15 $\mu$ m(可根据客户要求定制) D=220 $\pm$ 10 $\mu$ m (XXA,VR $\geq$ 100)	
金属 (T1/T2) Metal	正面 Front	TiNiAg
	背面 Back	TiNiAg
芯片尺寸 Chip Size	芯片尺寸(A: $\mu$ m) Chip	5588 $\pm$ 50
	电极尺寸(B: $\mu$ m) Pad	5290 $\pm$ 25



(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 (VR)

单向	双向	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	V <sub>c</sub> @ I <sub>pp</sub>	I <sub>pp</sub>	I <sub>R</sub> @ V <sub>RWM</sub>
		(V)	(V)min	(V)max	(mA)	(V) max	(A) min	(μA) max
TP022L-N5V0A2	TP022L-N5V0C1	5	6.4	7	50	9.2	544.0	3000
TP022L-N6V0A2	TP022L-N6V0C1	6	6.67	7.37	50	10.3	486.0	3000
TP022L-N6V5A2	TP022L-N6V5C1	6.5	7.22	7.98	50	11.2	448.0	250
TP022L-N7V0A2	TP022L-N7V0C1	7	7.8	8.6	50	12	417.0	100
TP022L-N7V5A2	TP022L-N7V5C1	7.5	8.33	9.21	5	12.9	388.0	75
TP022L-N8V0A2	TP022L-N8V0C1	8	8.89	9.83	5	13.6	367.0	50
TP022L-N8V5A2	TP022L-N8V5C1	8.5	9.44	10.4	5	14.4	347.0	20
TP022L-N9V0A2	TP022L-N9V0C1	9	10	11.1	5	15.4	325.0	10
TP022L-N010A2	TP022L-N010C1	10	11.1	12.3	5	17	294.0	5
TP022L-N011A1	TP022L-N011C1	11	12.2	13.5	5	18.2	275.0	1.58
TP022L-N012A1	TP022L-N012C1	12	13.3	14.7	5	19.9	252.0	1.58
TP022L-N013A1	TP022L-N013C1	13	14.4	15.9	5	21.5	233.0	1.58
TP022L-N014A1	TP022L-N014C1	14	15.6	17.2	5	23.2	216.0	1.58
TP022L-N015A1	TP022L-N015C1	15	16.7	18.5	5	24.4	205.0	1.58
TP022L-N016A1	TP022L-N016C1	16	17.8	19.7	5	26	193.0	1.58
TP022L-N017A1	TP022L-N017C1	17	18.9	20.9	5	27.6	181.0	1.58
TP022L-N018A1	TP022L-N018C1	18	20	22.1	5	29.2	172.0	1.58
TP022L-N020A1	TN022L-N020C3	20	22.2	24.5	5	32.4	155.0	1.58
TP022L-N022A1	TN022L-N022C3	22	24.4	26.9	5	35.5	141.0	1.58
TP022L-N024A1	TN022L-N024C3	24	26.7	29.5	5	38.9	129.0	1.58
TP022L-N026A1	TN022L-N026C3	26	28.9	31.9	5	42.1	119.0	1.58
TP022L-N028A1	TN022L-N028C3	28	31.1	34.4	5	45.4	110.0	1.58
TP022L-N030A1	TN022L-N030C3	30	33.3	36.8	5	48.4	103.0	1.58
TP022L-N033A1	TN022L-N033C3	33	36.7	40.6	5	53.3	93.9	1.58
TP022L-N036A1	TN022L-N036C3	36	40	44.2	5	58.1	86.1	1.58
TP022L-N040A1	TN022L-N040C3	40	44.4	49.1	5	64.5	77.6	1.58
TP022L-N043A1	TN022L-N043C3	43	47.8	52.8	5	69.4	72.1	1.58
TP022L-N045A1	TN022L-N045C3	45	50	55.3	5	72.7	68.8	1.58
TP022L-N048A1	TN022L-N048C3	48	53.3	58.9	5	77.4	64.7	1.58
TP022L-N051A1	TN022L-N051C3	51	56.7	62.7	5	82.4	60.7	1.58
TP022L-N054A1	TN022L-N054C3	54	60	66.3	5	87.1	57.5	1.58
TP022L-N058A1	TN022L-N058C3	58	64.4	71.2	5	93.6	53.5	1.58
TP022L-N060A1	TN022L-N060C3	60	66.7	73.7	5	96.8	51.7	1.58
TP022L-N064A1	TN022L-N064C3	64	71.1	80.6	5	103	48.6	1.58
TN022L-N070A1	TN022L-N070C3	70	77.8	86	5	113	44.3	1.58
TN022L-N075A1	TN022L-N075C3	75	83.3	92.1	5	121	41.4	1.58
TN022L-N080A1	TN022L-N080C3	80	86.7	95.8	5	126	39.7	1.58
TN022L-N085A1	TN022L-N085C3	85	94.4	104	5	137	36.5	1.58
TN022L-N090A1	TN022L-N090C3	90	100	111	5	146	34.2	1.58