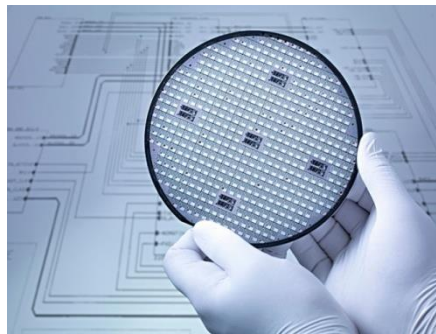


## 114mil 高可靠性 TVS 芯片选型



### TVS Diode series



## 114 高可靠性 TVS

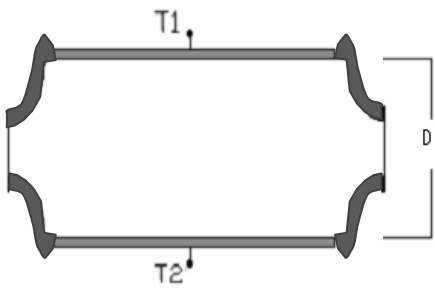
### 描述

该 TVS 系列产品适用于高可靠性要求的特殊应用环境，例如：车规、高端工控以及高空通讯基站等应用场景。

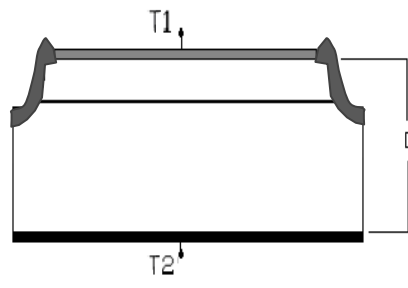
- 低漏电流
- 快速相应速度 (从 0->VBR 响应时间小于 1ps)
- 双层保护工艺 (电泳玻璃钝化+公司特有保护工艺)
- 良好的钳位能力
- 承受 1500W 峰值脉冲 (10/1000 $\mu$ s)
- 符合 AEC-Q101 (封装匹配优秀情况下)

### 芯片结构图

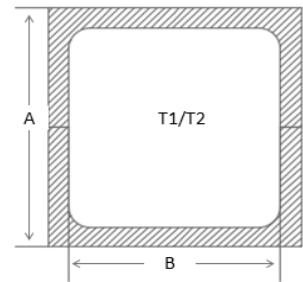
芯片工艺 Wafer tech	电泳玻璃钝化工艺+公司特有保护工艺	
圆片尺寸 Wafer Size	$\Phi$ 5inch	
芯片厚度 Chip Thickness	D=265 $\pm$ 15 $\mu$ m(可根据客户要求定制)	
金属 (T1/T2) Metal	正面 Front	TiNiAg
	背面 Back	TiNiAg
芯片尺寸	芯片尺寸(A: $\mu$ m)	2895 $\pm$ 50
	电极尺寸(B: $\mu$ m)	2387 $\pm$ 25



(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
HP0114-N5V0A2	HP0114-N5V0C1	5	6.4	7	10	9.2	163.0	500
HP0114-N6V0A2	HP0114-N6V0C1	6	6.67	7.37	10	10.3	145.6	500
HP0114-N6V5A2	HP0114-N6V5C1	6.5	7.22	7.98	10	11.2	134	100
HP0114-N7V0A2	HP0114-N7V0C1	7	7.8	8.6	10	12	125.0	50
HP0114-N7V5A2	HP0114-N7V5C1	7.5	8.33	9.21	1	12.9	116.3	50
HP0114-N8V0A2	HP0114-N8V0C1	8	8.89	9.83	1	13.6	110.3	50
HP0114-N8V5A2	HP0114-N8V5C1	8.5	9.44	10.4	1	14.4	104.2	20
HP0114-N9V0A2	HP0114-N9V0C1	9	10	11.1	1	15.4	97.4	10
HP0114-N010A2	HP0114-N010C1	10	11.1	12.3	1	17	88.2	5
HP0114-N011A1	HP0114-N011C1	11	12.2	13.5	1	18.2	82.4	1
HP0114-N012A1	HP0114-N012C1	12	13.3	14.7	1	19.9	75.4	1
HP0114-N013A1	HP0114-N013C1	13	14.4	15.9	1	21.5	69.8	1
HP0114-N014A1	HP0114-N014C1	14	15.6	17.2	1	23.2	64.7	1
HP0114-N015A1	HP0114-N015C1	15	16.7	18.5	1	24.4	61.5	1
HP0114-N016A1	HP0114-N016C1	16	17.8	19.7	1	26	57.7	1
HP0114-N017A1	HP0114-N017C1	17	18.9	20.9	1	27.6	54.4	1
HP0114-N018A1	HP0114-N018C1	18	20	22.1	1	29.2	51.4	1
HN0114-N020A1	HN0114-N020C3	20	22.2	24.5	1	32.4	46.3	1
HN0114-N022A1	HN0114-N022C3	22	24.4	26.9	1	35.5	42.3	1
HN0114-N024A1	HN0114-N024C3	24	26.7	29.5	1	38.9	38.6	1
HN0114-N026A1	HN0114-N026C3	26	28.9	31.9	1	42.1	35.6	1
HN0114-N028A1	HN0114-N028C3	28	31.1	34.4	1	45.4	33.1	1
HN0114-N030A1	HN0114-N030C3	30	33.3	36.8	1	48.4	31.0	1
HN0114-N033A1	HN0114-N033C3	33	36.7	40.6	1	53.3	28.2	1
HN0114-N036A1	HN0114-N036C3	36	40	44.2	1	58.1	25.8	1
HN0114-N040A1	HN0114-N040C3	40	44.4	49.1	1	64.5	23.3	1
HN0114-N043A1	HN0114-N043C3	43	47.8	52.8	1	69.4	21.6	1
HN0114-N045A1	HN0114-N045C3	45	50	55.3	1	72.7	20.6	1
HN0114-N048A1	HN0114-N048C3	48	53.3	58.9	1	77.4	19.4	1
HN0114-N051A1	HN0114-N051C3	51	56.7	62.7	1	82.4	18.2	1
HN0114-N054A1	HN0114-N054C3	54	60	66.3	1	87.1	17.2	1
HN0114-N058A1	HN0114-N058C3	58	64.4	71.2	1	93.6	16.1	1
HN0114-N060A1	HN0114-N060C3	60	66.7	73.7	1	96.8	15.5	1
HN0114-N064A1	HN0114-N064C3	64	71.1	78.6	1	103	14.6	1
HN0114-N070A1	HN0114-N070C3	70	77.8	86	1	113	13.3	1
HN0114-N075A1	HN0114-N075C3	75	83.3	92.1	1	121	12.4	1
HN0114-N080A1	HN0114-N078C3	80	88.8	97.6	1	129.6	11.6	1
HN0114-N085A1	HN0114-N085C3	85	94.4	104	1	137	11.0	1