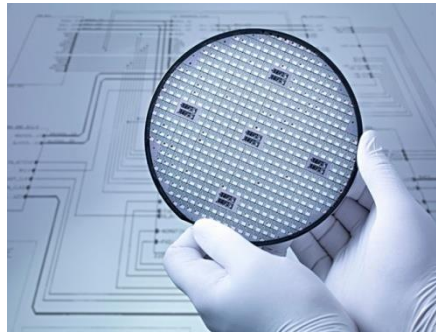


## 160mil TVS 芯片选型



## TVS Diode series



# 160TVS

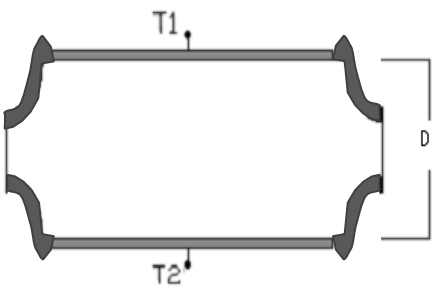
## 描述

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。

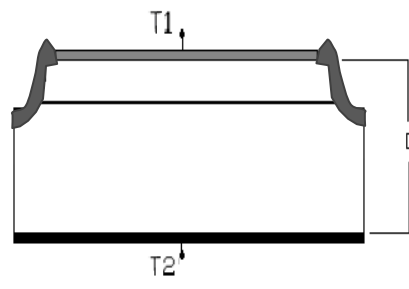
- 低漏电流
- 快速相应速度 (从 0->VBR 响应时间小于 1ps)
- 玻璃钝化结
- 良好的钳位能力
- 承受 1500W 峰值脉冲 (10/1000μs)

## 芯片结构图

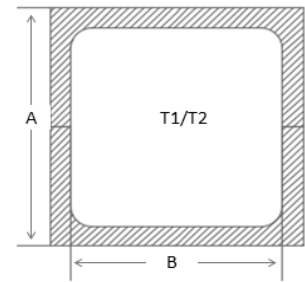
芯片工艺 Wafer tech	台面玻璃钝化工艺	
圆片尺寸 Wafer Size	Φ5inch	
芯片厚度 Chip Thickness	D=265±15μm(可根据客户要求定制)	
金属 (T1/T2) Metal	正面 Front	TiNiAg
	背面 Back	TiNiAg
芯片尺寸 Chip Size	芯片尺寸(A: μm) Chip	4064±50
	电极尺寸(B: μm) Pad	3769±25



(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	( $\mu$ A) max
TN0160-N090A1	TN0160-N090C3	90	100	111	1	146	10.3	1
TN0160-N100A4	TN0160-N100C3	100	111	123	1	162	9.3	1
TN0160-N110A4	TN0160-N110C3	110	122	135	1	177	8.5	1
TN0160-N120A4	TN0160-N120C3	120	133	147	1	193	7.8	1
TN0160-N130A4	TN0160-N130C3	130	144	159	1	209	7.2	1
TN0160-N150A4	TN0160-N150C3	150	167	185	1	243	6.2	1
TN0160-N160A4	TN0160-N160C3	160	180	197	1	259	5.8	1
TN0160-N170A4	TN0160-N170C3	170	189	209	1	275	5.5	1
TN0160-N180A4	TN0160-N180C3	180	201	222	1	292	5.2	1
TN0160-N200A4	TN0160-N200C3	200	224	247	1	324	4.7	1
TN0160-N220A4	TN0160-N220C3	220	246	272	1	356	4.2	1
TN0160-N250A2	TN0160-N250C7	250	279	309	1	405	3.7	1
TN0160-N300A2	TN0160-N300C7	300	335	371	1	486	3.1	1
TN0160-N350A2	TN0160-N350C7	350	391	432	1	567	2.65	1
TN0160-N400A2	TN0160-N400C7	400	447	494	1	648	2.31	1
TN0160-N440A2	TN0160-N440C7	440	492	543	1	713	2.1	1

**芯片电参数-TVS (VBR)**

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
TN0160-P100A1	TN0160-P100C3	85.5	95	105	1	137	11	1
TN0160-P110A4	TN0160-P110C3	94	105	116	1	152	10	1
TN0160-P120A4	TN0160-P120C3	102	114	126	1	165	9.1	1
TN0160-P130A4	TN0160-P130C3	111	124	137	1	179	8.4	1
TN0160-P150A4	TN0160-P150C3	128	143	158	1	207	7.3	1
TN0160-P160A4	TN0160-P160C3	136	152	168	1	219	6.9	1
TN0160-P170A4	TN0160-P170C3	145	162	179	1	234	6.5	1
TN0160-P180A4	TN0160-P180C3	154	171	189	1	246	6.1	1
TN0160-P200A4	TN0160-P200C3	171	190	210	1	274	5.5	1
TN0160-P220A4	TN0160-P220C3	185	209	231	1	328	4.6	1
TN0160-P250A4	TN0160-P250C7	214	237	263	1	344	4.4	1
TN0160-P300A2	TN0160-P300C7	256	285	315	1	414	3.7	1
TN0160-P350A2	TN0160-P350C7	300	332	368	1	482	3.1	1
TN0160-P380A2	TN0160-P380C7	325	333	367	1	524	2.9	1
TN0160-P400A2	TN0160-P400C7	342	380	420	1	548	2.9	1
TN0160-P440A2	TN0160-P440C7	376	418	462	1	602	2.7	1
TN0160-P480A2	TN0160-P480C7	408	456	504	1	658	2.5	1
TN0160-P510A2	TN0160-P510C7	434	485	535	1	698	2.2	1
TN0160-P520A2	TN0160-P520C7	445	494	546	1	717	2.1	1
TN0160-P530A2	TN0160-P530C7	451	504	556	1	725	2.1	1
TN0160-P540A2	TN0160-P540C7	460	513	567	1	740	2.0	1
TN0160-P550A2	TN0160-P550C7	468	523	577	1	760	2.0	1
TN0160-P600A2	TN0160-P600C7	512	570	630	1	828	1.8	1