

500 Watt Voidless (TZS)

1N6103,&A
thru
1N6132,&A

Transient Zener Suppressors

Applications

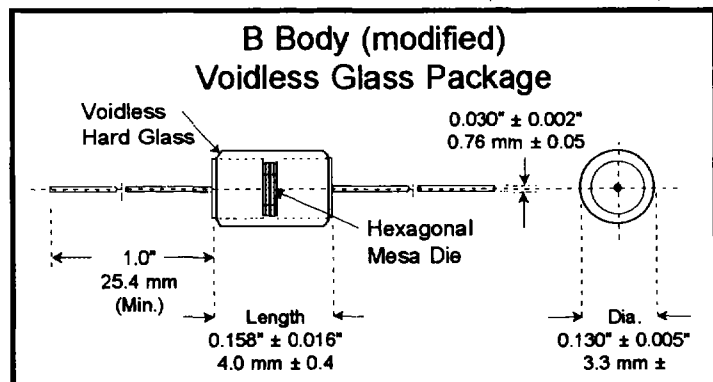
Symmetrical, bidirectional Transient voltage protection against static (ESD), power and lightening. The hard glass voidless construction is especially suited for the hostile environments in aerospace and military equipment applications where performance and a small footprint are important.

Available in JAN / TX / TXV per MIL-S-19500 / 516.

The family can be processed to S level with source control drawings.

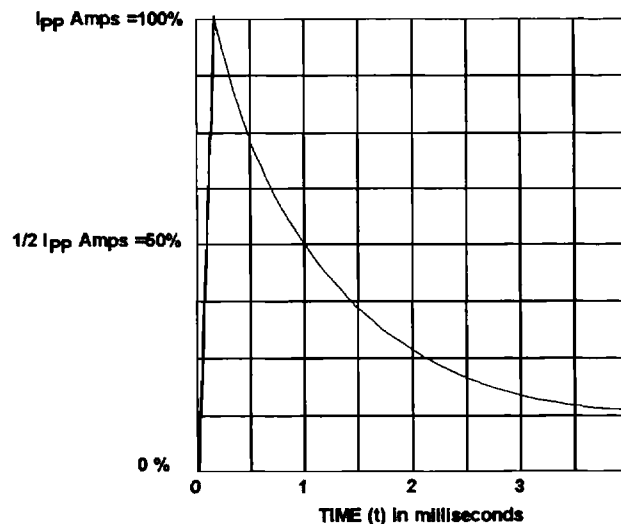
Features

- Six Sigma quality
- High surge capability
- Microminiature package
- Humidity proof hard glass
- No thermal fatigue
- Metallurgically bonded
- Thermally matched system
- Zero solderability defects
- Sigma Bond™ plated contacts



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at $T_L = 75^\circ\text{C}$, 3/8" from case	P_D	3.0	Watts
Maximum Operating & Storage Temperature Range	$T_{Op\&St}$	-55 to +175	$^\circ\text{C}$
Peak Power surge for 1 mSec. @ 50% of I_{pp}	P_{pk}	500	Watts
Power Derating at T_L 3/8" from case = 75°C	P_{DR}	30 (Max)	mW/ $^\circ\text{C}$

DETAILED SPECIFICATIONS
ON REVERSE SIDE



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1N6103 & A
thru
1N6132 & A series

500 Watt TZS
Detail
Specifications

Type	Minimum Breakdown Voltage (V_{BR}) @ I_{BR} Volts	Test Current I_{BR} mA	Stand-off Voltage (V_R) Volts	Maximum Leakage Current (I_R) @ V_R @ (I_{PP})		Clamping Voltage (V_C MAX.) Volts	Max. Peak Pulse Current 1/2 tp = 1mS (exp) tr = 10μS (I_{PP}) @ tp A(pk)	Maximum Temperature Coefficient @ I_{BR} (αVZ) %/°C
				25° C μA	150° C μA			
1N6103A	6.75	175	5.7	50	750	11.8	42.4	.06
1N6104A	7.38	150	6.2	20	500	12.7	39.4	.06
1N6105A	8.19	150	6.9	20	300	14.0	35.7	.06
1N6106A ✓	9.00	125	7.6	20	200	15.2	32.9	.07
1N6107A ✓	9.90	125	8.4	20	200	16.3	30.7	.07
1N6108A ✓	10.8	100	9.1	20	150	17.7	28.2	.07
1N6109A ✓	11.7	100	9.9	20	150	19.0	26.3	.08
1N6110A ✓	13.5	75	11.4	20	100	21.9	22.8	.08
1N6111A ✓	14.4	75	12.2	20	100	23.4	21.4	.08
1N6112A ✓	16.2	65	13.7	1	100	26.3	19.0	.085
1N6113A ✓	18.0	65	15.2	1	100	29.0	17.2	.085
1N6114A ✓	19.8	50	16.7	1	100	31.9	15.7	.085
1N6115A ✓	21.6	50	18.2	1	100	34.8	14.4	.09
1N6116A ✓	24.3	50	20.6	1	100	39.2	12.8	.09
1N6117A ✓	27.0	40	22.8	1	100	43.6	11.5	.09
1N6118A ✓	29.7	40	25.1	1	100	47.9	10.4	.095
1N6119A ✓	32.4	30	27.4	1	100	52.3	9.6	.095
1N6120A ✓	35.1	30	29.7	1	100	56.2	8.9	.095
1N6121A ✓	38.7	30	32.7	1	100	62.0	8.1	.095
1N6122A ✓	42.3	25	35.8	1	100	67.7	7.4	.095
1N6123A ✓	45.9	25	38.8	1	100	73.5	6.8	.095
1N6124A ✓	50.4	20	42.6	1	100	80.7	6.2	.095
1N6125A ✓	55.8	20	47.1	1	100	89.3	5.6	.100
1N6126A ✓	61.2	20	51.7	1	100	98.0	5.1	.100
1N6127A ✓	67.5	20	56.0	1	100	108.1	4.6	.100
1N6128A	73.8	15	62.2	1	100	118.2	4.2	.100
1N6129A	81.9	15	69.2	1	100	131.1	3.8	.100
1N6130A	90.0	12	76.0	1	100	144.1	3.5	.100
1N6131A	99.0	12	83.6	1	100	158.5	3.2	.100
1N6132A	108.0	10	91.2	1	100	172.9	2.9	.100

Non A suffix units have a 5% higher max.surge voltage @ I_{SM} and a 5% lower $V_{(BR)}$ MIN.

To order military parts, use the above bold ✓ numbers with the appropriate JAN, JTX or JTXV prefix.



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