

1500 Watt Voidless (TZS)

1N6139,&A
thru
1N6168,&A

Transient Zener Suppressors

Applications

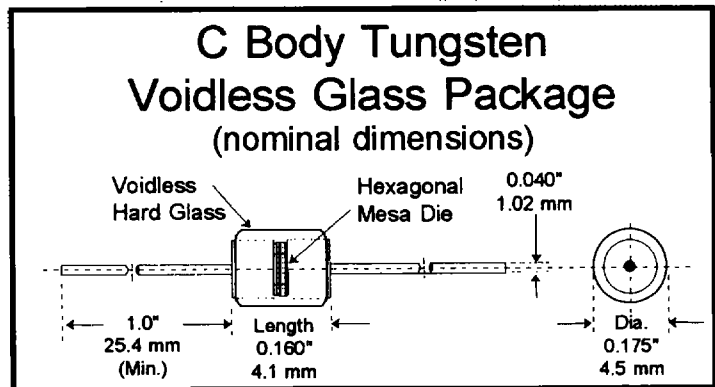
Hard Glass Tungsten

Symmetrical, bidirectional Transient voltage protection against static (ESD), power and lightning. 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.

Pending BKC DESC approvals, BKC can produce generic equivalents to JAN / TX / TXV and JANS levels per MIL-S-19500 / 552 with internal source control drawings. Use HR, HRX, HRV or HRS suffixes for cost effective high reliability parts or use your own SCD.

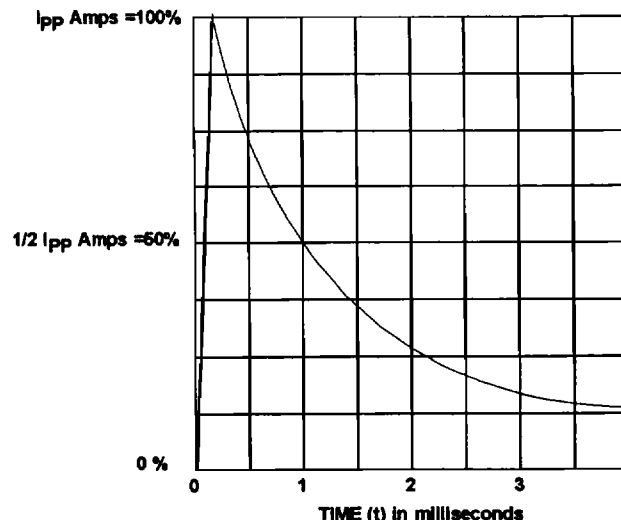
Features

- 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	5.0	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}	1500	Watts
Power Derating at T_L 3/8" from case = 75°C	P_{DR}	50	mW/ $^\circ\text{C}$

DETAILED SPECIFICATIONS
ON REVERSE SIDE

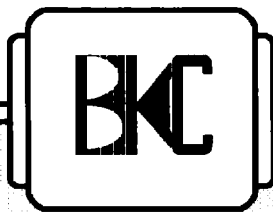


6 Lake Street
Lawrence, MA
USA 01841

Telephone (508) 681-0392 • FAX (508) 681-9135

BKCSS104

1500 Watt Voidless (TZS)



Transient Zener Suppressors

1N6139 & A
thru
1N6168 & A series

1500 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		Clamping Voltage @ (I_{pp}) 1/2 tp = 1mS (exp) (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} (αV_Z) %/°C
				25° C µA	150° C µA			
1N6139A	6.75	175	5.7	300	3000	11.8	133.9	.06
1N6140A	7.38	150	6.2	100	2000	12.7	124.0	.06
1N6141A	8.19	150	6.9	100	1200	14.0	111.9	.06
1N6142A ✓	9.00	125	7.6	100	800	15.2	103.4	.07
1N6143A ✓	9.90	125	8.4	20	800	16.3	96.2	.07
1N6144A ✓	10.8	100	9.1	20	600	17.7	88.8	.07
1N6145A ✓	11.7	100	9.9	20	600	19.0	82.4	.08
1N6146A ✓	13.5	75	11.4	20	400	21.9	71.4	.08
1N6147A ✓	14.4	75	12.2	20	400	23.4	67.3	.08
1N6148A ✓	16.2	65	13.7	10	400	26.3	59.8	.085
1N6149A ✓	18.0	65	15.2	5	400	29.0	54.2	.085
1N6150A ✓	19.8	50	16.7	5	400	31.9	49.2	.085
1N6151A ✓	21.6	50	18.2	5	400	34.8	45.0	.09
1N6152A ✓	24.3	50	20.6	5	400	39.2	40.1	.09
1N6153A ✓	27.0	40	22.8	5	400	43.6	36.0	.09
1N6154A ✓	29.7	40	25.1	5	400	47.9	32.8	.095
1N6155A ✓	32.4	30	27.4	5	400	52.3	30.1	.095
1N6156A ✓	35.1	30	29.7	5	400	56.2	28.0	.095
1N6157A ✓	38.7	30	32.7	5	400	62.0	25.4	.095
1N6158A ✓	42.3	25	35.8	5	400	67.7	23.2	.095
1N6159A ✓	45.9	25	38.8	5	400	73.5	21.4	.095
1N6160A ✓	50.4	20	42.6	5	400	80.7	19.5	.095
1N6161A ✓	55.8	20	47.1	5	400	89.3	17.6	.100
1N6162A ✓	61.2	20	51.7	5	400	98.0	15.4	.100
1N6163A ✓	67.5	20	56.0	5	400	108.1	14.5	.100
1N6164A	73.8	15	62.2	5	400	118.2	13.3	.100
1N6165A	81.9	15	69.2	5	400	131.1	12.0	.100
1N6166A	90.0	12	76.0	5	400	144.1	10.9	.100
1N6167A	99.0	12	83.6	5	400	158.5	9.9	.100
1N6168A	108.0	10	91.2	5	400	172.9	9.1	.100

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

Pending BKC DESC approvals, to buy high reliability parts, add the appropriate
HR, HRX, HRV or HRS suffix to the above numbers.



6 Lake Street
Lawrence, MA
USA 01841

Telephone (508) 681-0392 • FAX (508) 681-9135