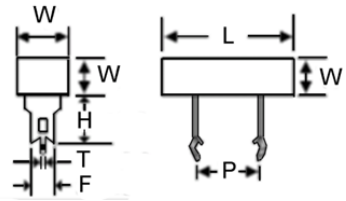
Features:

- Special lead configurations
- RoHS compliant / lead-free

Electrical Specifications – Lead Style 01

Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage	Resistance Range (Ω) Wirewound	Resistance Range (Ω) Metal Oxide
NSZ5…-01	5W	300V	0.1 - 220	240 - 50K
NSZ7…-01	7W	350V	0.1 - 220	240 - 50K
NSZ10…-01	10W	500V	0.1 - 220	240 - 50K

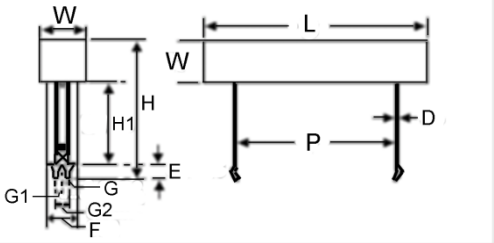


Mechanical Specifications – Lead Style 01

Type / Code	F	H	L	P	T	W	Unit
NSZ5…-01	0.21 ± 0.01 5.40 ± 0.20	0.51 ± 0.04 13.00 ± 1.00	1.06 ± 0.04 27.00 ± 1.00	0.59 ± 0.04 15.00 ± 1.00	0.06 ± 0.01 1.50 ± 0.20	0.39 ± 0.04 10.00 ± 1.00	inches mm
NSZ7…-01	0.89 ± 0.04 22.50 ± 1.00	0.89 ± 0.04 22.50 ± 1.00	1.38 ± 0.04 35.00 ± 1.00	0.89 ± 0.04 22.50 ± 1.00	0.89 ± 0.04 22.50 ± 1.00	0.39 ± 0.04 10.00 ± 1.00	inches mm
NSZ10…-01	1.38 ± 0.04 35.00 ± 1.00	1.38 ± 0.04 35.00 ± 1.00	1.89 ± 0.04 48.00 ± 1.00	1.38 ± 0.04 35.00 ± 1.00	1.38 ± 0.04 35.00 ± 1.00	0.39 ± 0.04 10.00 ± 1.00	inches mm

Electrical Specifications – Lead Style 02

Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage	Resistance Range (Ω) Wirewound	Resistance Range (Ω) Metal Oxide
NSZ3…-02	3W	200V	0.1 - 220	240 - 50K
NSZ5…-02	5W	300V	0.1 - 220	240 - 50K
NSZ7…-02	7W	350V	0.1 - 220	240 - 50K
NSZ10…-02	10W	500V	0.1 - 220	240 - 50K
NSZ15…-02	15W	500V	0.1 - 220	240 - 50K

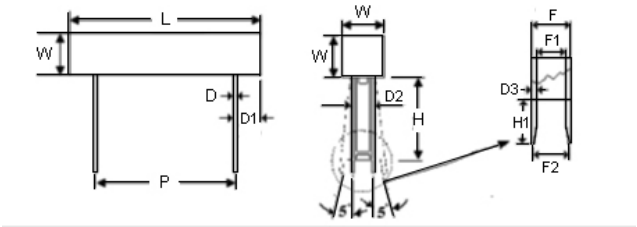


Mechanical Specifications – Lead Style 02

Type / Code	D	E	F	G	G1	G2	H	H1	L	P	W	Unit
NSZ3…-02	0.020 0.50	0.177 ± 0.020 4.50 ± 0.50	0.287 ± 0.039 7.30 ± 1.00	0.039 ± 0.008 1.00 ± 0.20	0.059 ± 0.008 1.50 ± 0.20	0.138 ± 0.008 3.50 ± 0.20	1.154 ± 0.039 29.30 ± 1.00	0.591 + 0.079 / -0.039 15.00 + 2.00 / -1.00	0.984 ± 0.039 25.00 ± 1.00	0.492 ± 0.039 12.50 ± 1.00	0.386 ± 0.020 9.80 ± 0.50	inches mm
NSZ5…-02	0.020 0.50	0.177 ± 0.020 4.50 ± 0.50	0.287 ± 0.039 7.30 ± 1.00	0.039 ± 0.008 1.00 ± 0.20	0.059 ± 0.008 1.50 ± 0.20	0.138 ± 0.008 3.50 ± 0.20	1.154 ± 0.039 29.30 ± 1.00	0.591 + 0.079 / -0.039 15.00 + 2.00 / -1.00	1.102 ± 0.039 28.00 ± 1.00	0.591 ± 0.039 15.00 ± 1.00	0.386 ± 0.020 9.80 ± 0.50	inches mm
NSZ7…-02	0.020 0.50	0.177 ± 0.020 4.50 ± 0.50	0.287 ± 0.039 7.30 ± 1.00	0.039 ± 0.008 1.00 ± 0.20	0.059 ± 0.008 1.50 ± 0.20	0.138 ± 0.008 3.50 ± 0.20	1.154 ± 0.039 29.30 ± 1.00	0.591 + 0.079 / -0.039 15.00 + 2.00 / -1.00	1.398 ± 0.039 35.50 ± 1.00	0.886 ± 0.039 22.50 ± 1.00	0.386 ± 0.020 9.80 ± 0.50	inches mm
NSZ10…-02	0.020 0.50	0.177 ± 0.020 4.50 ± 0.50	0.287 ± 0.039 7.30 ± 1.00	0.039 ± 0.008 1.00 ± 0.20	0.059 ± 0.008 1.50 ± 0.20	0.138 ± 0.008 3.50 ± 0.20	1.154 ± 0.039 29.30 ± 1.00	0.591 + 0.079 / -0.039 15.00 + 2.00 / -1.00	1.890 ± 0.039 48.00 ± 1.00	1.378 ± 0.039 35.00 ± 1.00	0.386 ± 0.020 9.80 ± 0.50	inches mm
NSZ15…-02	0.020 0.50	0.177 ± 0.020 4.50 ± 0.50	0.287 ± 0.039 7.30 ± 1.00	0.039 ± 0.008 1.00 ± 0.20	0.059 ± 0.008 1.50 ± 0.20	0.138 ± 0.008 3.50 ± 0.20	1.240 ± 0.039 31.50 ± 1.00	0.591 + 0.079 / -0.039 15.00 + 2.00 / -1.00	1.890 ± 0.039 48.00 ± 1.00	1.280 ± 0.039 32.50 ± 1.00	0.472 ± 0.020 12.00 ± 0.50	inches mm

Electrical Specifications – Lead Style 03

Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage	Resistance Range (Ω) Wirewound	Resistance Range (Ω) Metal Oxide
NSZ5…-03	5W	300V	0.1 - 220	240 - 50K
NSZ7…-03	7W	350V	0.1 - 220	240 - 50K
NSZ10…-03	10W	500V	0.1 - 220	240 - 50K
NSZ15…-03	15W	500V	0.1 - 220	240 - 50K

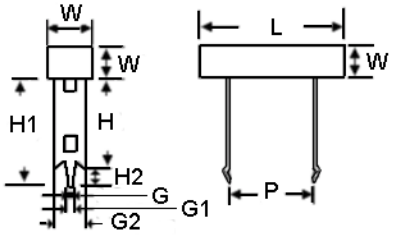


Mechanical Specifications – Lead Style 03

Type / Code	D	D1 min	D2	D3	F	F1	F2	H	H1	L	P	W	Unit
NSZ5…-03	0.018 ± 0.004 0.46 ± 0.10	0.244 6.20	0.287 ± 0.012 7.28 ± 0.31	0.044 ± 0.005 1.12 ± 0.13	0.287 7.28	0.162 4.11	0.244 ± 0.030 6.20 ± 0.76	0.394 ± 0.082 10.00 ± 2.09	0.205 ± 0.018 5.20 ± 0.46	1.063 + 0.040 / -0.080 27.00 + 1.02 / -2.03	0.591 ± 0.060 15.00 ± 1.52	0.394 ± 0.050 10.00 ± 1.27	inches mm
NSZ7…-03	0.018 ± 0.004 0.46 ± 0.10	0.150 3.81	0.287 ± 0.012 7.28 ± 0.31	0.044 ± 0.005 1.12 ± 0.13	0.287 7.28	0.162 4.11	0.244 ± 0.030 6.20 ± 0.76	0.981 ± 0.082 24.93 ± 2.09	0.205 ± 0.018 5.20 ± 0.46	1.433 + 0.040 / -0.080 36.40 + 1.02 / -2.03	0.885 ± 0.060 22.49 ± 1.52	0.394 ± 0.050 10.00 ± 1.27	inches mm
NSZ10…-03	0.018 ± 0.004 0.46 ± 0.10	0.150 3.81	0.287 ± 0.012 7.28 ± 0.31	0.044 ± 0.005 1.12 ± 0.13	0.287 7.28	0.162 4.11	0.244 ± 0.030 6.20 ± 0.76	0.981 ± 0.082 24.93 ± 2.09	0.205 ± 0.018 5.20 ± 0.46	1.889 + 0.040 / -0.080 47.97 + 1.02 / -2.03	1.379 ± 0.060 35.03 ± 1.52	0.387 ± 0.050 9.82 ± 1.27	inches mm
NSZ15…-03	0.018 ± 0.004 0.46 ± 0.10	0.150 3.81	0.287 ± 0.012 7.28 ± 0.31	0.044 ± 0.005 1.12 ± 0.13	0.287 7.28	0.162 4.11	0.244 ± 0.030 6.20 ± 0.76	0.981 ± 0.082 24.93 ± 2.09	0.205 ± 0.018 5.20 ± 0.46	1.889 + 0.040 / -0.080 47.97 + 1.02 / -2.03	1.279 ± 0.060 32.49 ± 1.52	0.492 ± 0.050 12.49 ± 1.27	inches mm

Electrical Specifications – Lead Style 04

Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage	Resistance Range (Ω) Wirewound	Resistance Range (Ω) Metal Oxide
NSZ5…-04	5W	300V	0.1 - 220	240 - 50K
NSZ7…-04	7W	350V	0.1 - 220	240 - 50K
NSZ10…-04	10W	500V	0.1 - 220	240 - 50K
NSZ15…-04	15W	700V	0.1 - 220	240 - 50K



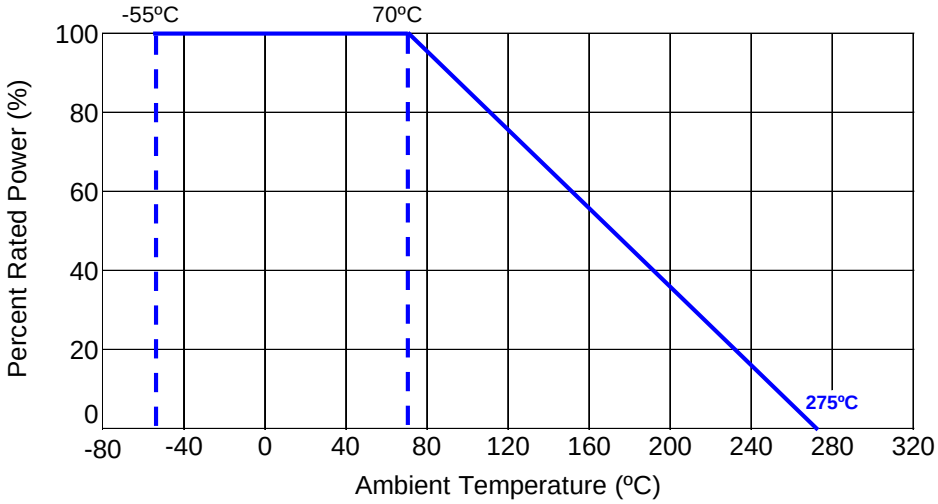
Mechanical Specifications – Lead Style 04

Type / Code	G	G1	G2	H	H1	H2	L	P	W	Unit
NSZ5…-04	0.04 ± 0.01 1.00 ± 0.20	0.06 ± 0.01 1.50 ± 0.20	0.19 to 0.30 4.70 to 7.60	0.98 ± 0.04 25.00 ± 1.00	1.18 ± 0.04 30.00 ± 1.00	0.18 ± 0.02 4.50 ± 0.50	1.06 max 27.00 max	0.59 ± 0.04 15.00 ± 1.00	0.39 max 10.00 max	inches mm
NSZ7…-04	0.04 ± 0.01 1.00 ± 0.20	0.06 ± 0.01 1.50 ± 0.20	0.19 to 0.30 4.70 to 7.60	0.98 ± 0.04 25.00 ± 1.00	1.26 ± 0.04 32.00 ± 1.00	0.18 ± 0.02 4.50 ± 0.50	1.38 max 35.00 max	0.94 ± 0.04 24.00 ± 1.00	0.39 max 10.00 max	inches mm
NSZ10…-04	0.04 ± 0.01 1.00 ± 0.20	0.06 ± 0.01 1.50 ± 0.20	0.19 to 0.30 4.70 to 7.60	0.98 ± 0.04 25.00 ± 1.00	1.26 ± 0.04 32.00 ± 1.00	0.18 ± 0.02 4.50 ± 0.50	1.89 max 48.00 max	1.38 ± 0.04 35.00 ± 1.00	0.39 max 10.00 max	inches mm
NSZ15…-04	0.04 ± 0.01 1.00 ± 0.20	0.06 ± 0.01 1.50 ± 0.20	0.19 to 0.30 4.70 to 7.60	0.43 ± 0.06 11.00 ± 1.60	0.61 ± 0.06 15.50 ± 1.60	0.18 ± 0.02 4.50 ± 0.50	1.89 ± 0.06 48.00 ± 1.50	1.28 ± 0.06 32.50 ± 1.50	0.50 ± 0.04 12.70 ± 1.00	inches mm

Performance Characteristics	
Test	Test Results
Moisture Resistance	± 5%
Thermal Shock	± 2%
Load Life @ 70°C - 1,000 hrs.	± 5%
Resistance to Soldering Heat	± 2%
Short Time Overload - 5xPn for 5sec	± 2%
Dielectric Withstanding Voltage	± 2%

Operating Temperature Range: -55ºC to +275ºC

Power Derating Curve:



How to Order

1	2	3	4	5	6	7	8	9	10	11	12
N	S	Z	7	J	B	1	K	0	0	-	0	1

Product Series	
NSZ	Ceramic Housed Wirewound with Specialty Leads

Size	Power
3	3W
5	5W
7	7W
10	10W
15	15W

Tolerance		
Code	Tol	Value
J	5%	E24

Packaging			
Code	Description	Size	Quantity
B	Bulk	All Sizes	1,000

Resistance Value
Four characters with the multiplier used as the decimal holder.
1 ohm = 1R00 680 ohm = 680R 50 Kohm = 50K0

Lead Style
Code
01
02
03
04

Legacy Part Number (before January 3, 2011):

SEI Type	Lead Style	Power Ratings	Nominal Resistance	Tolerance	Packaging
NSZ	1	7	1K	5%	A

Type	Description
NSZ	Ceramic Housed Wirewound with Specialty Leads

Code
1
2
3
4

Code	Watts
3	3W
5	5W
7	7W
10	10W
15	15W

Tolerance	Values
5%	E24

Types	Qty	Description	Code
All	1,000	Bulk	A