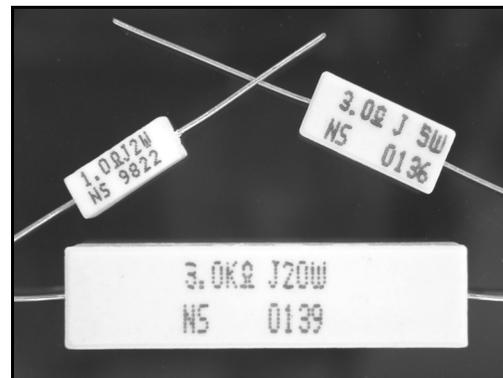


NSP/NSPP Series — Ceramic Housed - Consumer Grade

Features

- Flameproof construction
- Temperature coefficient of resistance of $\pm 200 \text{ ppm}/^\circ\text{C}$
- Low resistance values
- Power derating is linear from 100% at 25°C to zero at 250°C
- Also available with standoffs as NSPP
- Other styles and configurations available; contact factory
- RoHS compliant / lead-free

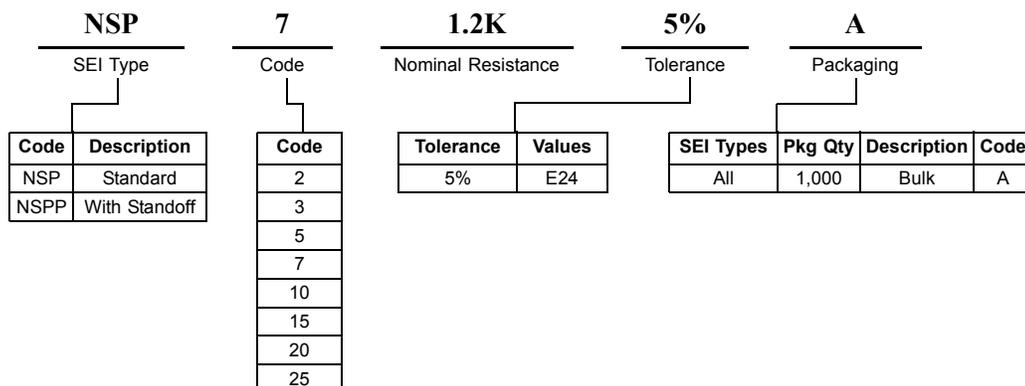


Electrical Specifications

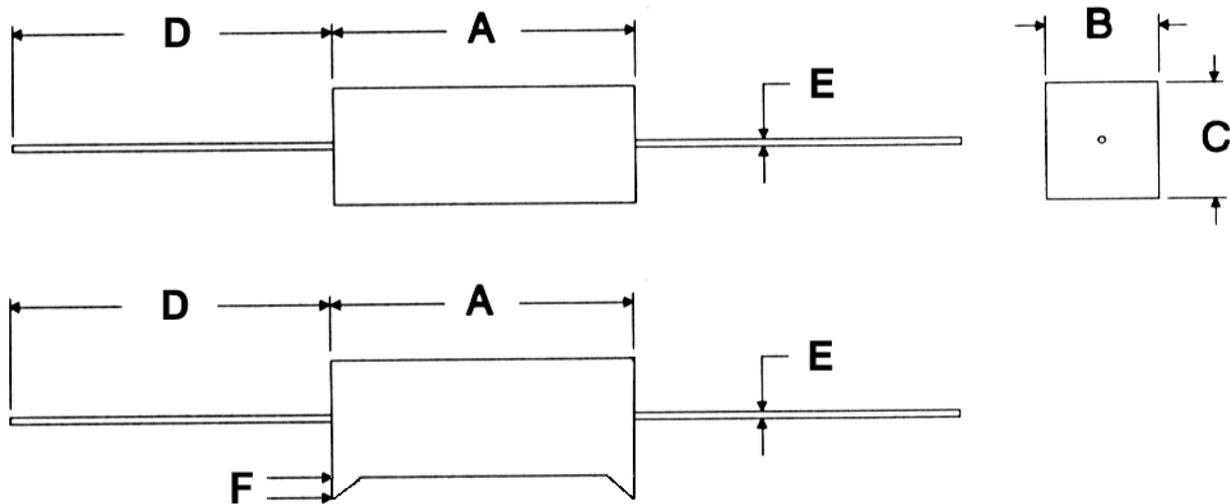
Type / Code	Power Rating (Watts) @ 25°C	Maximum Working Voltage*	Resistance Temperature Coefficient	Ohmic Range and Tolerance
				5%
NSP 2	2W	100V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 20\text{K}\Omega$
NSP 3	3W	200V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 20\text{K}\Omega$
NSP 5	5W	300V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 20\text{K}\Omega$
NSP 7	7W	350V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 20\text{K}\Omega$
NSP 10	10W	500V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 20\text{K}\Omega$
NSP 15	15W	600V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 2\text{K}\Omega$
NSP 20	20W	700V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 2\text{K}\Omega$
NSP 25	25W	700V	$\pm 200 \text{ ppm}/^\circ\text{C}$	$0.1\Omega - 5.1\text{K}\Omega$

* Lesser of $\sqrt{\text{PR}}$ or maximum working voltage.

How to Order



NSP/NSPP Series — Ceramic Housed - Consumer Grade



Mechanical Specifications

Type / Code	A Body Length	B Body Width	C Body Height	D Lead Length (Bulk)	E Lead Diameter	F Standoff Height	Units
NSP 2	0.71 ± 0.02 18.0 ± 0.5	0.28 ± 0.04 7.0 ± 1.0	0.28 ± 0.04 7.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.026 ± 0.002 0.65 ± 0.05	—	inches mm
NSPP 2	0.71 ± 0.02 18.0 ± 0.5	0.28 ± 0.04 7.0 ± 1.0	0.28 ± 0.04 7.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.026 ± 0.002 0.65 ± 0.05	0.04 1.00	inches mm
NSP 3	0.87 ± 0.02 22.0 ± 0.5	0.32 ± 0.04 8.0 ± 1.0	0.32 ± 0.04 8.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSPP 3	0.87 ± 0.02 22.0 ± 0.5	0.32 ± 0.04 8.0 ± 1.0	0.32 ± 0.04 8.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	0.04 1.00	inches mm
NSP 5	0.87 ± 0.02 22.0 ± 0.5	0.39 ± 0.04 10.0 ± 1.0	0.35 ± 0.04 10.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSPP 5	0.87 ± 0.02 22.0 ± 0.5	0.39 ± 0.04 10.0 ± 1.0	0.35 ± 0.04 9.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	0.08 2.00	inches mm
NSP 7	1.38 ± 0.02 35.0 ± 0.5	0.39 ± 0.04 10.0 ± 1.0	0.39 ± 0.04 10.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSP 10	1.89 ± 0.02 48.0 ± 0.5	0.39 ± 0.04 10.0 ± 1.0	0.39 ± 0.04 10.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSPP 10	1.89 ± 0.02 48.0 ± 0.5	0.39 ± 0.04 10.0 ± 1.0	0.35 ± 0.04 9.0 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	0.12 3.00	inches mm
NSP 15	1.89 ± 0.02 48.0 ± 0.5	0.49 ± 0.04 12.5 ± 1.0	0.49 ± 0.04 12.5 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSP 20	2.36 ± 0.04 60.0 ± 1.0	0.57 ± 0.04 14.5 ± 1.0	0.53 ± 0.04 13.5 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	inches mm
NSPP 20	2.36 ± 0.04 60.0 ± 1.0	0.49 ± 0.04 12.5 ± 1.0	0.49 ± 0.04 12.5 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	0.12 3.00	inches mm
NSP 25	2.36 ± 0.04 60.0 ± 1.0	0.57 ± 0.04 14.5 ± 1.0	0.53 ± 0.04 13.5 ± 1.0	1.42 ± 0.12 36.0 ± 3.0	0.032 ± 0.002 0.80 ± 0.05	—	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	±2%
Dielectric Withstanding Voltage	±2%
Operating Temperature Range	-55°C to +250°C