

SERIES PPC, NPC RESISTORS, TERMINATIONS

High Power Chip – 50 & 100 Ohms

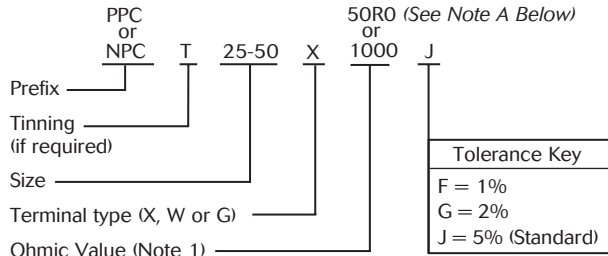


GENERAL INFORMATION

When mounted on an appropriate heat sink, these chip devices provide high power dissipation in terminations and as balancing resistors in Wilkinson power divider networks. Laser trimming provides maximum peak and average R.F. power capability.

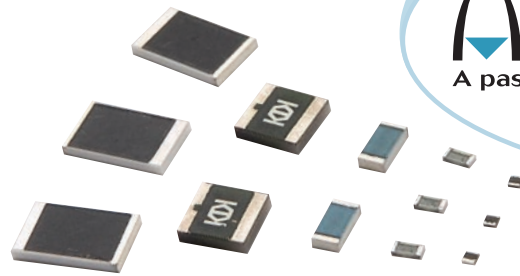
ORDERING INFORMATION

EXAMPLE: Typical Model No.

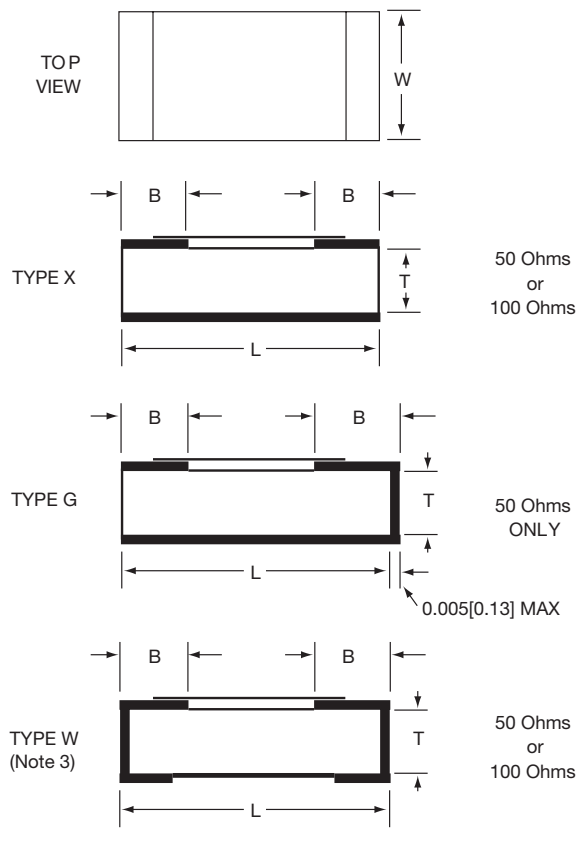


NOTE A

Resistance value is expressed using military 4-digit call-out.
 50R0 = 50 ohms
 1000 = 100 ohms
 Other values from 10–500 ohms may be available as special order.
 Contact factory for availability.



Physical Dimensions



GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| Solderable Terminals | Electroplated Silver over Nickel (PPC) Gold over Nickel alloy (NPC) |
| Substrate | Beryllium Oxide Ceramic |
| Resistive Element | Thin Film and Thick Film* |

NOTES

- The "L" and "T" dimensions are for the substrate only and do not include terminal thickness or optional tinning thickness.
- Thermal Resistance (R^θ) is measured in °C/W between resistive film and mounting surface.
- The CW power rating is based on maximum film temperature of +150°C and with maximum heatsink temperature of +100°C. Power is based on infinite and ideal heatsink. Type "W" termination style does not have full back plane metallization and typically handles 1/10 the rated power.

PERFORMANCE SPECIFICATIONS

| Model Prefix | W | | L (Note 1) | | T (Note 1) | | B | | Capacitance (pf) Typical | R ^θ C/W Max. (Note 2) | C/W Power | Freq. GHz (**) |
|---------------|-------|--------|------------|--------|------------|--------|-------|---------|--------------------------|----------------------------------|-----------|----------------|
| | in | [mm] | in | [mm] | in | [mm] | in | [mm] | | | | |
| *PPC 100-200A | 0.100 | [2,5] | 0.200 | [5,1] | 0.040 | [1,02] | 0.030 | [0,76] | 0.8 | 0.80 | 20W | DC-4.0 |
| *PPC 250-250A | 0.250 | [6,4] | 0.250 | [6,4] | 0.040 | [1,02] | 0.050 | [1,27] | 1.2 | 0.30 | 40W | DC-2.5 |
| *PPC 250-375A | 0.250 | [6,4] | 0.375 | [9,53] | 0.040 | [1,02] | 0.050 | [1,27] | 3.5 | 0.15 | 150W | DC-1.0 |
| NPC 25-50 | 0.025 | [0,64] | 0.050 | [1,27] | 0.010 | [0,25] | 0.012 | [0,305] | 0.3 | 3.90 | 3W | DC-12.4 |
| *NPC 50-50 | 0.050 | [1,27] | 0.050 | [1,27] | 0.010 | [0,25] | 0.012 | [0,305] | 0.5 | 1.90 | 5W | DC-10 |
| *NPC 50-100 | 0.050 | [1,27] | 0.100 | [2,5] | 0.010 | [0,25] | 0.017 | [0,43] | 1.0 | 0.72 | 10W | DC-4.0 |
| NPC 75-150 | 0.075 | [1,91] | 0.150 | [3,8] | 0.010 | [0,25] | 0.020 | [0,51] | 1.8 | 0.29 | 15W | DC-4.0 |

*Low cost thick film models available on these sizes. Consult factory for specifications.

**Typical VSWR for all terminations is 1.25:1

KEY: Inches [Millimeters] .XX ±0.03 .XXX ±0.010 LX ±0.8 .XX ±0.251



60 South Jefferson Road, Whippany, NJ 07981
 Tel: 973-887-8100 • Fax: 973-884-0445
 www.aeroflex-kdi.com • sales@aeroflex-kdi.com

