

# SERIES PPC, NPC RESISTORS, TERMINATIONS

## High Power Chip – 50 & 100 Ohms

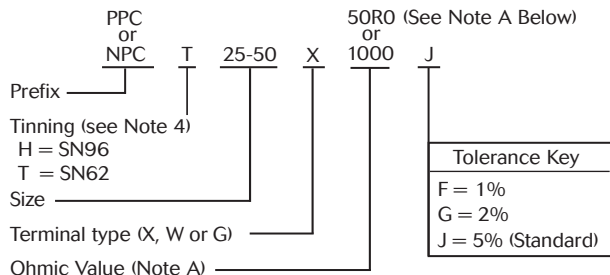


### GENERAL INFORMATION

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

100R0 = 100 ohms

Other values from 10–500 ohms may be available as special order.

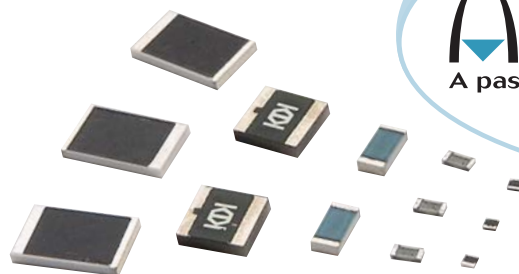
Contact factory for availability.

### GENERAL SPECIFICATIONS

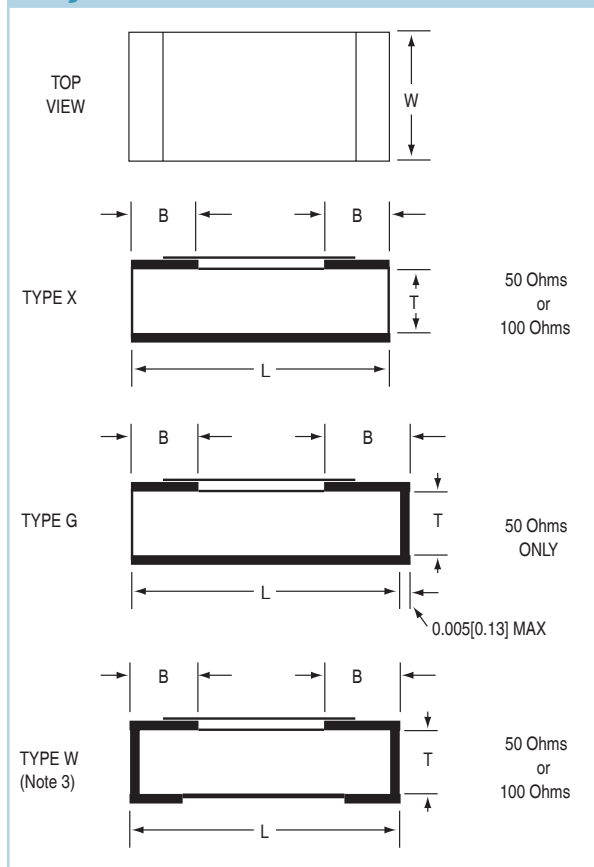
Solderable Terminals	Electroplated Silver over Nickel (PPC) Gold over Nickel alloy (NPC)
Substrate	Beryllium Oxide Ceramic
Resistive Element	Thin Film and Thick Film*

### NOTES

- The "L" and "T" dimensions are for the substrate only and do not include terminal thickness or optional tinning thickness.
- Thermal Resistance (R<sup>θ</sup>) 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.
- Tinning with SN96 "Lead Free" high temperature solder will maintain RoHS compliance.



### Physical Dimensions



### PERFORMANCE SPECIFICATIONS

Model Prefix	W		L (Note 1)		T (Note 1)		B	Capacitance (pf) Typical	R <sup>θ</sup> C/W Max. (Note 2)	C/W Power	Freq. GHz (**)	
	in	[mm]	in	[mm]	in	[mm]						in
*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 ±0.25]



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

