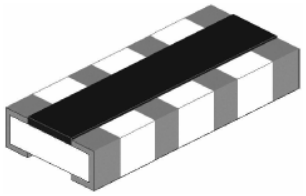
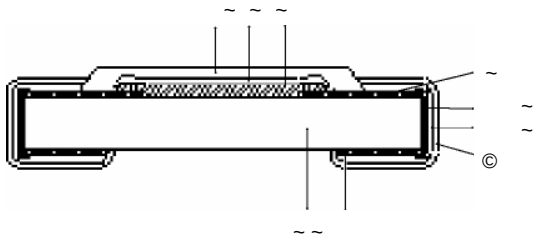
Thick Film Array Chip Resistor-CN-41

Construction





®	Alumina Substrate	®	Edge Electrode (Ag)	®	Resistor Layer (RuO_2/Ag)
~	Bottom Electrode (Ag)	®	Barrier Layer (Ni)	®	Primary Overcoat (Glass)
~	Top Electrode (Ag-Pd)	~	External Electrode (Sn)	~	Secondary Overcoat (Epoxy)

Features

- Contribute to higher-density mounting and reduction in size of devices by remarkably PCB
- Contribute to the size reduction of small electronic equipment such as Mobile phone, HDD
- Reduced the mounting time by decreasing the number of components
- Suitable for IR reflow soldering

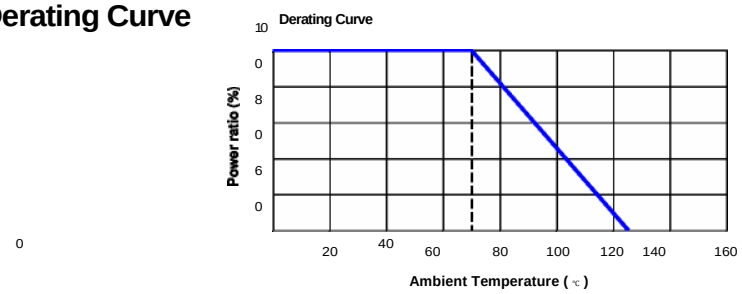
Part Numbering

CN-	41	J	L	6	----1K
Product Type	Dimensions (L×W)	Resistance Tolerance	Function Code	Packaging Code	Resistance
CN-	41: 0201x4	J: ±5%	L: 8P4R	6: 7" Reel 10Kpcs F: Bulk	----1K: 1KQ - --3K3: 3.3KQ ---10K: 10KQ "-" to fill up 6 spaces

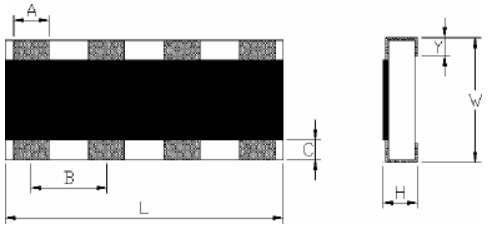
Applications

- Pull-up/pull-down resistors for digital circuits
- Used in interface circuits of LCD displays, memory modules, etc.
- Communication Equipments

Derating Curve



Dimension



Unit: mm

Type	Number of Resistors	L	W	H	A	B	C	Y	Weight (g) (1000pcs)
CN-41	4	1.4±0.10	0.6±0.10	0.35±0.10	0.20±0.10	0.4±0.1	0.1±0.07	0.15±0.05	0.833

Standard Electrical Specifications

Item / Type	Power Rating / Rated Current	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Number of Resistors	Resistance Range ±5%	TCR (PPM/°C)
CN-41	1/32W	-55 ~ +125°C	12.5V	25V	4	10fl - 1Mfl	±200
Jumper	0.5A					0fl (<50mfl)	

Operating Voltage=√(P*R) or Max. operating voltage Listed above, whichever is lower.

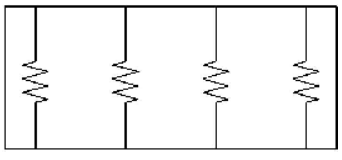
Overload Voltage=2.5*√(P*R) or Max. overload voltage Listed above, whichever is lower.

Environmental Characteristics

Item	Requirement ±5%	Requirement Jumper	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.		-55°C~+1 25°C, 25°C is the reference temperature
Short Time Overload	±(2.0%+0.1 fl)	<50mfl	2.5 times RCWV or Max. overload voltage for 5 seconds
Insulation Resistance	≥1 0G		Max. overload voltage for 1 minute
Endurance	±(3.0%+0.1fl)	<100mfl	70±2°C, Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Damp Heat with Load	±(3.0%+0.1fl)	<50mfl	40±2°C, 90~95% R.H., Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Dry Heat	±(3.0%+0.1 fl)	<1 00mfl	at +125°C for 1000 hrs
Bending Strength	±(1 .0%+0.05fl)	<50mfl	Bending once for 5 seconds with 3mm
Solderability	>95% coverage		245±5°C for 3 seconds
Resistance to Soldering Heat	±(1 .0%+0.05fl)	<50mfl	260±5°C for 10 seconds
Voltage Proof	No breakdown or flashover		1.42 times RCWV (RMS) for 1 minute
Rapid Change of Temperature	±(1 .0%+0.05fl)	<50mfl	-55°C to +125°C, 5 cycles

- **Reference Standards: IEC 60115-1, 60068-2-58; JIS-C 5201 -1**
- **Storage Temperature: 25±3 °C; Humidity < 80%RH**

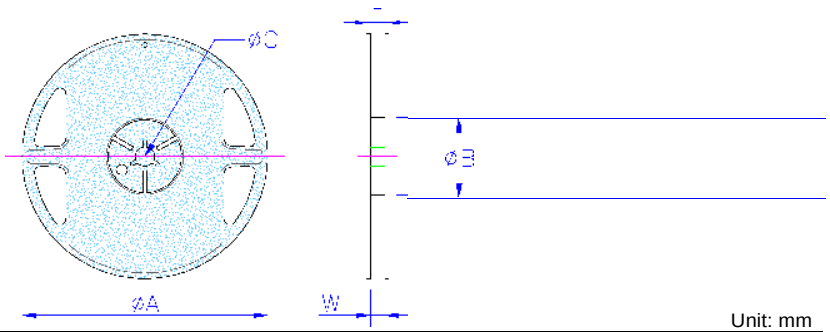
Equivalent Circuit Diagram



CN-41

Packaging

Reel Specifications & Packaging Quantity

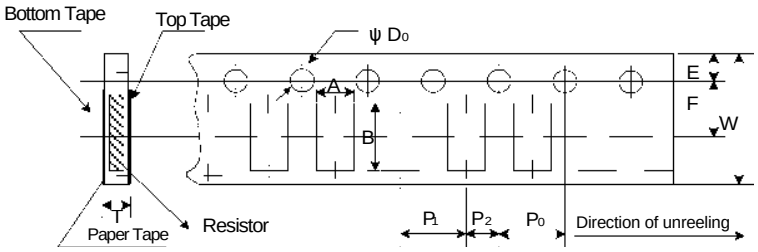


Unit: mm

Type	Packaging Quantity	Tape width	Reel Diameter	ØA	ØB	ØC	W	T
CN-41	Paper 10K	8mm	7 inch	178.5±1.5	$60^{+1/-0}$	13.0±0.2	9.0±0.5	12.5±0.5

Paper Tape Specifications

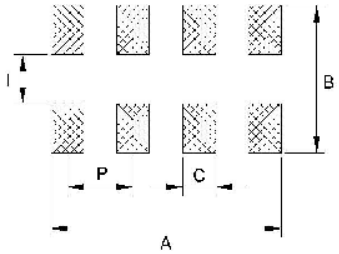
Unit: mm



Type	A	B	W	E	F	P_0	P_1	P_2	$ØD_0$	T
CN-41	0.77±0.03	1.57±0.03	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.05	2.0±0.05	$1.5^{+0.1}_{-0}$	0.5±0.1

Recommend Land Pattern

Unit: mm



Type	A	B	C	C1	I	I1	P	P1
CN-41	1.40	0.90	0.20	--	0.30	--	0.40	--