



HKT

Chip Capacitor – SMD

Applications

HKT SMD is widely used in Analog & Digital Modems, LAN/WAN Interface, Lighting Ballast Circuits, Voltage Multipliers, DC-DC Converter, Back-lighting Inverters.

Feature

- Small size
- Excellent Break down voltage, low DF
- RoHS compliant
- Suit to re-flow soldering, wave soldering, hand soldering

Product Part Number Identification

1. HKT multilayer chip capacitor

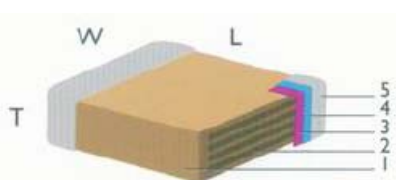
HKT 1206 X7R 102 K 202 P T R
 Part No a b c d e f g h

- a. Size Code (Inches).
- b. T.C. Characteristics: NPO(COG), X7R
- c. Nominal Capacitance(pF):0R6=0.6,1R6=1.6,102=10X10²,105=10X10⁵
- d. Tolerance:
 A=±0.1pF, B=±0.2pF, C=±0.25pF, D=±0.5pF, F=±1%
 G=±2%, J=±5%, K=±10%, M=±20%, Z=+80%/-20%
- e. Rated Voltage:
 500=50V, 501=500V, 102=1000V, 502=5000V
- f. Termination: P=Standard
- g. Packaging Style: N=Bulk, T=Tape & Reel.
- h. Pb: R=RoHS

Structure and Dimension (Unit: Inches)

Structure

No	Name
1	Ceramic Dielectric
2	Inner Electrode
3	Silver Layer
4	Nickel Layer
5	Tin Layer



Dimensions (Unit: Inches)

Size	Length(L±0.1)	Width(W±0.1)
0603	0.06	0.03
0805	0.08	0.05
1206	0.12	0.06
1210	0.12	0.10
1808	0.18	0.08
1812	0.18	0.12
2220	0.22	0.20
2225	0.22	0.25

Coefficient

Parameter	NPO (COG) Temperature Wave	X7R Temperature Wave												
Operating Temperature Range	-55~+125°C	-55~+125°C												
Temperature Coefficient														
Dissipation Factor	DF≤0.15%	DF≤2.50%												
Aging	None	≤2.5% decade hour												
Insulation Resistance	≥100GΩ	≥500ΩF OR 50 GΩ												
Dielectric Strength	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>Test Voltage</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>Ur=100V</td> <td>2.5Ur</td> <td>60±5S</td> </tr> <tr> <td>200V≤Ur≤1000V</td> <td>1.5Ur</td> <td>60±5S</td> </tr> <tr> <td>Ur>1000V</td> <td>1.2Ur</td> <td>60±5S</td> </tr> </tbody> </table>		Rated Voltage	Test Voltage	Time	Ur=100V	2.5Ur	60±5S	200V≤Ur≤1000V	1.5Ur	60±5S	Ur>1000V	1.2Ur	60±5S
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