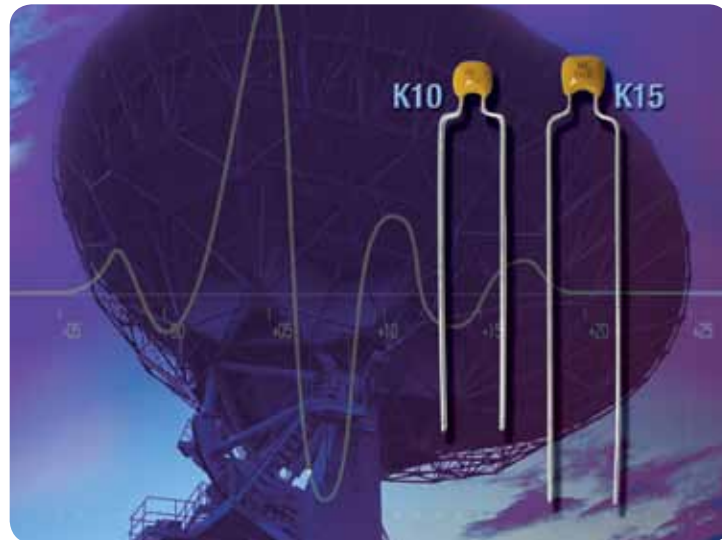




**THE DATASHEET OF
K680J15C0GF53L2**



K10 Series Multilayer Ceramic Dipped Radial Capacitors



KEY BENEFITS

- High capacitance in small size
- Cost effective solution
- Compliant to RoHS Directive 2011/65/EU, and REACH Regulation EC 1907/2006

KEY SPECIFICATIONS

- Capacitance range: Class 1 C0G range 10 pF to 1 nF; Class 2 X7R range 100 pF to 100 nF; Class 2 Y5V range 10 nF to 150 nF
- Dielectric strength: 250 % of rated voltage
- Insulation resistance: $\geq 10\,000\ \text{M}\Omega$
- IEC 60384-9 Class 2
- IEC 60384-8 Class 1 and EIA 198
- Operating Temperature: C0G, X7R: $-55\ ^\circ\text{C}$ to $+125\ ^\circ\text{C}$; Y5V: $-30\ ^\circ\text{C}$ to $+85\ ^\circ\text{C}$

APPLICATIONS

- Bypassing
- Coupling/decoupling
- Signal comparison

RESOURCES

- Datasheet: Mono-Kap® - <http://www.vishay.com/doc?45183>
- For technical questions contact cml@vishay.com





CERAMIC CAPACITORS

MONO-KAP®



Capacitors - High Capacitance in Small Size

Dipped Radial Multilayer Ceramic K10 Capacitors

| COG (NPO) DIELECTRIC | | | |
|----------------------|------|----|-----|
| SIZE | | 10 | |
| RATED VOLTAGE | | 50 | 100 |
| VALUE | CODE | | |
| 10 pF | 100 | * | * |
| 12 pF | 120 | * | * |
| 15 pF | 150 | * | * |
| 18 pF | 180 | * | * |
| 22 pF | 220 | * | * |
| 27 pF | 270 | * | * |
| 33 pF | 330 | * | * |
| 39 pF | 390 | * | * |
| 47 pF | 470 | * | * |
| 56 pF | 560 | * | * |
| 68 pF | 680 | * | * |
| 82 pF | 820 | * | * |
| 100 pF | 101 | * | * |
| 120 pF | 121 | * | * |
| 150 pF | 151 | * | * |
| 180 pF | 181 | * | * |
| 220 pF | 221 | * | * |
| 270 pF | 271 | * | * |
| 330 pF | 331 | * | * |
| 390 pF | 391 | * | * |
| 470 pF | 471 | * | * |
| 560 pF | 561 | * | * |
| 680 pF | 681 | * | * |
| 820 pF | 821 | * | * |
| 1000 pF | 102 | * | * |
| 1200 pF | 122 | * | * |
| 1500 pF | 152 | * | * |
| 1800 pF | 182 | * | * |
| 2200 pF | 222 | * | * |
| 2700 pF | 272 | * | * |
| 3300 pF | 332 | * | * |
| 3900 pF | 392 | * | * |
| 4700 pF | 472 | * | * |
| 5600 pF | 562 | * | * |
| 6800 pF | 682 | * | * |
| 8200 pF | 822 | * | * |
| 0.01 μF | 103 | * | * |

| X7R DIELECTRIC | | | |
|----------------|------|----|-----|
| SIZE | | 10 | |
| RATED VOLTAGE | | 50 | 100 |
| VALUE | CODE | | |
| 100 pF | 101 | * | * |
| 120 pF | 121 | * | * |
| 150 pF | 151 | * | * |
| 180 pF | 181 | * | * |
| 220 pF | 221 | * | * |
| 270 pF | 271 | * | * |
| 330 pF | 331 | * | * |
| 390 pF | 391 | * | * |
| 470 pF | 471 | * | * |
| 560 pF | 561 | * | * |
| 680 pF | 681 | * | * |
| 820 pF | 821 | * | * |
| 1000 pF | 102 | * | * |
| 1200 pF | 122 | * | * |
| 1500 pF | 152 | * | * |
| 1800 pF | 182 | * | * |
| 2200 pF | 222 | * | * |
| 2700 pF | 272 | * | * |
| 3300 pF | 332 | * | * |
| 3900 pF | 392 | * | * |
| 4700 pF | 472 | * | * |
| 5600 pF | 562 | * | * |
| 6800 pF | 682 | * | * |
| 8200 pF | 822 | * | * |
| 0.01 μF | 103 | * | * |
| 0.012 μF | 123 | * | * |
| 0.015 μF | 153 | * | * |
| 0.018 μF | 183 | * | * |
| 0.022 μF | 223 | * | * |
| 0.027 μF | 273 | * | * |
| 0.033 μF | 333 | * | * |
| 0.039 μF | 393 | * | * |
| 0.047 μF | 473 | * | * |
| 0.056 μF | 563 | * | * |
| 0.068 μF | 683 | * | * |
| 0.082 μF | 823 | * | * |
| 0.10 μF | 104 | * | * |
| 0.12 μF | 124 | * | * |
| 0.15 μF | 154 | * | * |
| 0.22 μF | 224 | * | * |
| 0.33 μF | 334 | * | * |
| 0.47 μF | 474 | * | * |
| 0.68 μF | 684 | * | * |
| 1.0 μF | 105 | * | * |

| Y5V DIELECTRIC | | | |
|----------------|------|----|--|
| SIZE | | 10 | |
| RATED VOLTAGE | | 50 | |
| VALUE | CODE | | |
| 0.01 μF | 103 | * | |
| 0.015 μF | 153 | * | |
| 0.022 μF | 223 | * | |
| 0.033 μF | 333 | * | |
| 0.047 μF | 473 | * | |
| 0.068 μF | 683 | * | |
| 0.10 μF | 104 | * | |
| 0.15 μF | 154 | * | |
| 0.22 μF | 224 | * | |
| 0.33 μF | 334 | * | |
| 0.47 μF | 474 | * | |
| 0.68 μF | 684 | * | |
| 1.0 μF | 105 | * | |



| QUICK REFERENCE DATA | | | | | |
|--------------------------|------------------|-------|------------------|-------|--------------------|
| DESCRIPTION | VALUE | | | | |
| Capacitance range | 10 pF to 1000 pF | | 100 pF to 0.1 μF | | 0.01 μF to 0.15 μF |
| Rated DC voltage | 50 V | 100 V | 50 V | 100 V | 50 V |
| Tolerance on capacitance | ± 5 %, ± 10 % | | ± 10 %, ± 20 % | | + 80 %/- 20 % |
| Dielectric Code | COG (NPO) | | X7R | | Y5V |

| ORDERING INFORMATION | | | | | | | | | |
|--|---|---|------------------|-------------------|---|---------------------|--|---|--------------------------------------|
| K | 103 | K | 10 | X7R | F | 5 | 3 | H | 5 |
| PRODUCT TYPE | CAPACITANCE CODE | CAPACITANCE TOLERANCE | SIZE CODE | TEMP. CHAR. | RATED VOLTAGE | LEAD DIA. | LEAD LENGTH/PACKAGING | LEAD STYLE | LEAD SPACING |
| K = Mono-Kap | Two significant digits followed by the number of zeros. For example: 103 = 10 000 pF | J = ± 5 % K = ± 10 % M = ± 20 % Z = + 80%/- 20 % | Ref. mech. spec. | COG X7R Y5V | F = 50 V _{DC} H = 100 V _{DC} | 5 = 0.5 mm (0.020") | 3 = Bulk, with lead length of 30 ± 5.0 mm (1.25") T = Tape and reel U = Ammopack | L = Straight Lead H = High seated assy | 2 = 2.5 (0.100") 5 = 5.0 (0.200") |
| Ordering Example: K-103-K-10-X7R-F-5-3-H-5 | | | | | | | | | |

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Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View K680J15C0GF53L2 on WIN SOURCE](#)
-  [Vishay Information](#)

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