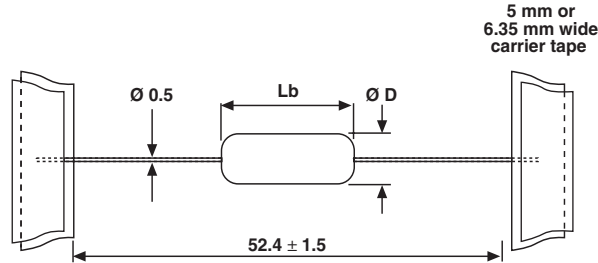


**Dipped Axial Multilayer Ceramic Capacitors  
for 50 - 100 Vdc**



**RoHS  
COMPLIANT**

**DIMENSIONS**



| <b>CAPACITOR DIMENSIONS AND WEIGHT</b> |                                  |                                   |            |
|--|----------------------------------|-----------------------------------|------------|
| SIZE                                   | Lb <sub>max</sub> <sup>(1)</sup> | Ø D <sub>max</sub> <sup>(1)</sup> | WEIGHT (g) |
| 15                                     | 3.8<br>(0.150)                   | 2.5<br>(0.100)                    | ≈ 0.14     |
| 20                                     | 5.0<br>(0.200)                   | 3.0<br>(0.120)                    | ≈ 0.15     |

**Note**

1. Dimensions between the parentheses are in inches

| <b>QUICK REFERENCE DATA</b> |               |                  |                  |
|-----------------------------|---------------|------------------|------------------|
| DESCRIPTION                 | VALUE         |                  |                  |
| Capacitance range           | 10 to 5600 pF | 100 pF to 1.0 µF | 0.1 µF to 1.0 µF |
| Rated DC voltage            | 50 V    100 V | 50 V    100 V    | 50 V    100 V    |
| Tolerance on capacitance    | ± 5 %, ± 10 % | ± 10 %, ± 20 %   | + 80 /- 20 %     |
| Dielectric Code             | C0G (NP0)     | X7R              | Y5V              |

| <b>ORDERING INFORMATION</b>                     |   |   |  |                   |   |                    |                           |
|---|---|---|--|-------------------|---|--------------------|---------------------------|
| A   | 103   | K   | 15   | X7R               | F   | 5                  | TAA                       |
| PRODUCT TYPE                                    | CAPACITANCE CODE  | CAP. TOLERANCE  | SIZE CODE                                      | TEMP. CHAR.       | RATED VOLTAGE                                     | LEAD DIA.          | PACKAGING                 |
| A = Mono-Axial                                  | Two significant digits followed by the number of zeros.<br>For example:<br>473 = 47000 pF | J = ± 5 %<br>K = ± 10 %<br>M = ± 20 %<br>Z = + 80 /- 20 % | 15 = 3.8 (0.15") max.<br>20 = 5.0 (0.20") max. | C0G<br>X7R<br>Y5V | F = 50 V <sub>DC</sub><br>H = 100 V <sub>DC</sub> | 5 = 0.5 mm (0.20") | TAA = T & R<br>UAA = AMMO |
| <b>Ordering Example: A-103-K-15-X7R-F-5-TAA</b> |   |   |  |                   |   |                    |                           |



**CAPACITANCE RANGE CHART  
C0G (NP0) DIELECTRIC**

| SIZE          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 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  |    |     |    |     |

**X7R DIELECTRIC**

| SIZE          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 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          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 50 | 100 |
| 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  |    |     |    |     |

## PART NUMBER LISTING

| <b>MONO-AXIAL Y5V - 50 VDC CLEAR TEXT CODE</b> |                     |                        |           |
|--|---------------------|------------------------|-----------|
| CAP (pF)                                       | RATED VOLTAGE (Vdc) | + 80 /- 20 % TOLERANCE | PACKAGING |
| 10000  | 50 Vdc              | A103Z15Y5VF5TAA        | REEL      |
| 10000  |                     | A103Z15Y5VF5UAA        | AMMO      |
| 15000  |                     | A153Z15Y5VF5TAA        | REEL      |
| 15000  |                     | A153Z15Y5VF5UAA        | AMMO      |
| 22000  |                     | A223Z15Y5VF5TAA        | REEL      |
| 22000  |                     | A223Z15Y5VF5UAA        | AMMO      |
| 33000  |                     | A333Z15Y5VF5TAA        | REEL      |
| 33000  |                     | A333Z15Y5VF5UAA        | AMMO      |
| 47000  |                     | A473Z15Y5VF5TAA        | REEL      |
| 47000  |                     | A473Z15Y5VF5UAA        | AMMO      |
| 68000  |                     | A683Z15Y5VF5TAA        | REEL      |
| 68000  |                     | A683Z15Y5VF5UAA        | AMMO      |
| 100000   |                     | A104Z15Y5VF5TAA        | REEL      |
| 100000   |                     | A104Z15Y5VF5UAA        | AMMO      |
| 150000   |                     | A154Z15Y5VF5TAA        | REEL      |
| 150000   |                     | A154Z15Y5VF5UAA        | AMMO      |
| 220000   |                     | A224Z15Y5VF5TAA        | REEL      |
| 220000   |                     | A224Z15Y5VF5UAA        | AMMO      |
| 330000   |                     | A334Z15Y5VF5TAA        | REEL      |
| 330000   |                     | A334Z15Y5VF5UAA        | AMMO      |
| 470000   | A474Z20Y5VF5TAA     | REEL                   |           |
| 470000   | A474Z20Y5VF5UAA     | AMMO                   |           |
| 680000   | A684Z20Y5VF5TAA     | REEL                   |           |
| 680000   | A684Z20Y5VF5UAA     | AMMO                   |           |
| 1000000  | A105Z20Y5VF5TAA     | REEL                   |           |
| 1000000  | A105Z20Y5VF5UAA     | AMMO                   |           |

| <b>MONO-AXIAL X7R - 50 VDC CLEAR TEXT CODE</b> |                     |                 |                 |           |
|--|---------------------|-----------------|-----------------|-----------|
| CAP (pF)                                       | RATED VOLTAGE (Vdc) | 10 % TOLERANCE  | 20 % TOLERANCE  | PACKAGING |
| 100  | 50 Vdc              | A101K15X7RF5TAA | A101M15X7RF5TAA | REEL      |
| 100  |                     | A101K15X7RF5UAA | A101M15X7RF5UAA | AMMO      |
| 120  |                     | A121K15X7RF5TAA | A121M15X7RF5TAA | REEL      |
| 120  |                     | A121K15X7RF5UAA | A121M15X7RF5UAA | AMMO      |
| 150  |                     | A151K15X7RF5TAA | A151M15X7RF5TAA | REEL      |
| 150  |                     | A151K15X7RF5UAA | A151M15X7RF5UAA | AMMO      |
| 180  |                     | A181K15X7RF5TAA | A181M15X7RF5TAA | REEL      |
| 180  |                     | A181K15X7RF5UAA | A181M15X7RF5UAA | AMMO      |
| 220  |                     | A221K15X7RF5TAA | A221M15X7RF5TAA | REEL      |
| 220  |                     | A221K15X7RF5UAA | A221M15X7RF5UAA | AMMO      |
| 270  |                     | A271K15X7RF5TAA | A271M15X7RF5TAA | REEL      |
| 270  |                     | A271K15X7RF5UAA | A271M15X7RF5UAA | AMMO      |
| 330  |                     | A331K15X7RF5TAA | A331M15X7RF5TAA | REEL      |
| 330  |                     | A331K15X7RF5UAA | A331M15X7RF5UAA | AMMO      |
| 390  |                     | A391K15X7RF5TAA | A391M15X7RF5TAA | REEL      |
| 390  |                     | A391K15X7RF5UAA | A391M15X7RF5UAA | AMMO      |
| 470  |                     | A471K15X7RF5TAA | A471M15X7RF5TAA | REEL      |
| 470  |                     | A471K15X7RF5UAA | A471M15X7RF5UAA | AMMO      |
| 560  |                     | A561K15X7RF5TAA | A561M15X7RF5TAA | REEL      |
| 560  |                     | A561K15X7RF5UAA | A561M15X7RF5UAA | AMMO      |
| 680  | A681K15X7RF5TAA     | A681M15X7RF5TAA | REEL            |           |
| 680  | A681K15X7RF5UAA     | A681M15X7RF5UAA | AMMO            |           |



Dipped Axial Multilayer Ceramic Capacitors  
for 50 - 100 Vdc

| <b>MONO-AXIAL X7R - 50 VDC CLEAR TEXT CODE</b> |                            |                       |                       |                  |
|--|----------------------------|-----------------------|-----------------------|------------------|
| <b>CAP (pF)</b>                                | <b>RATED VOLTAGE (Vdc)</b> | <b>10 % TOLERANCE</b> | <b>20 % TOLERANCE</b> | <b>PACKAGING</b> |
| 820  | 50 Vdc                     | A821K15X7RF5TAA       | A821M15X7RF5TAA       | REEL             |
| 820  |                            | A821K15X7RF5UAA       | A821M15X7RF5UAA       | AMMO             |
| 1000   |                            | A102K15X7RF5TAA       | A102M15X7RF5TAA       | REEL             |
| 1000   |                            | A102K15X7RF5UAA       | A102M15X7RF5UAA       | AMMO             |
| 1200   |                            | A122K15X7RF5TAA       | A122M15X7RF5TAA       | REEL             |
| 1200   |                            | A122K15X7RF5UAA       | A122M15X7RF5UAA       | AMMO             |
| 1500   |                            | A152K15X7RF5TAA       | A152M15X7RF5TAA       | REEL             |
| 1500   |                            | A152K15X7RF5UAA       | A152M15X7RF5UAA       | AMMO             |
| 1800   |                            | A182K15X7RF5TAA       | A182M15X7RF5TAA       | REEL             |
| 1800   |                            | A182K15X7RF5UAA       | A182M15X7RF5UAA       | AMMO             |
| 2200   |                            | A222K15X7RF5TAA       | A222M15X7RF5TAA       | REEL             |
| 2200   |                            | A222K15X7RF5UAA       | A222M15X7RF5UAA       | AMMO             |
| 2700   |                            | A272K15X7RF5TAA       | A272M15X7RF5TAA       | REEL             |
| 2700   |                            | A272K15X7RF5UAA       | A272M15X7RF5UAA       | AMMO             |
| 3300   |                            | A332K15X7RF5TAA       | A332M15X7RF5TAA       | REEL             |
| 3300   |                            | A332K15X7RF5UAA       | A332M15X7RF5UAA       | AMMO             |
| 3900   |                            | A392K15X7RF5TAA       | A392M15X7RF5TAA       | REEL             |
| 3900   |                            | A392K15X7RF5UAA       | A392M15X7RF5UAA       | AMMO             |
| 4700   |                            | A472K15X7RF5TAA       | A472M15X7RF5TAA       | REEL             |
| 4700   |                            | A472K15X7RF5UAA       | A472M15X7RF5UAA       | AMMO             |
| 5600   |                            | A562K15X7RF5TAA       | A562M15X7RF5TAA       | REEL             |
| 5600   |                            | A562K15X7RF5UAA       | A562M15X7RF5UAA       | AMMO             |
| 6800   |                            | A682K15X7RF5TAA       | A682M15X7RF5TAA       | REEL             |
| 6800   |                            | A682K15X7RF5UAA       | A682M15X7RF5UAA       | AMMO             |
| 8200   |                            | A822K15X7RF5TAA       | A822M15X7RF5TAA       | REEL             |
| 8200   |                            | A822K15X7RF5UAA       | A822M15X7RF5UAA       | AMMO             |
| 10000  |                            | A103K15X7RF5TAA       | A103M15X7RF5TAA       | REEL             |
| 10000  |                            | A103K15X7RF5UAA       | A103M15X7RF5UAA       | AMMO             |
| 12000  |                            | A123K15X7RF5TAA       | A123M15X7RF5TAA       | REEL             |
| 12000  |                            | A123K15X7RF5UAA       | A123M15X7RF5UAA       | AMMO             |
| 15000  |                            | A153K15X7RF5TAA       | A153M15X7RF5TAA       | REEL             |
| 15000  |                            | A153K15X7RF5UAA       | A153M15X7RF5UAA       | AMMO             |
| 18000  |                            | A183K15X7RF5TAA       | A183M15X7RF5TAA       | REEL             |
| 18000  |                            | A183K15X7RF5UAA       | A183M15X7RF5UAA       | AMMO             |
| 22000  |                            | A223K15X7RF5TAA       | A223M15X7RF5TAA       | REEL             |
| 22000  |                            | A223K15X7RF5UAA       | A223M15X7RF5UAA       | AMMO             |
| 27000  |                            | A273K15X7RF5TAA       | A273M15X7RF5TAA       | REEL             |
| 27000  |                            | A273K15X7RF5UAA       | A273M15X7RF5UAA       | AMMO             |
| 33000  |                            | A333K15X7RF5TAA       | A333M15X7RF5TAA       | REEL             |
| 33000  |                            | A333K15X7RF5UAA       | A333M15X7RF5UAA       | AMMO             |
| 39000  | A393K15X7RF5TAA            | A393M15X7RF5TAA       | REEL                  |                  |
| 39000  | A393K15X7RF5UAA            | A393M15X7RF5UAA       | AMMO                  |                  |
| 47000  | A473K15X7RF5TAA            | A473M15X7RF5TAA       | REEL                  |                  |
| 47000  | A473K15X7RF5UAA            | A473M15X7RF5UAA       | AMMO                  |                  |
| 56000  | A563K15X7RF5TAA            | A563M15X7RF5TAA       | REEL                  |                  |
| 56000  | A563K15X7RF5UAA            | A563M15X7RF5UAA       | AMMO                  |                  |
| 68000  | A683K15X7RF5TAA            | A683M15X7RF5TAA       | REEL                  |                  |
| 68000  | A683K15X7RF5UAA            | A683M15X7RF5UAA       | AMMO                  |                  |
| 82000  | A823K15X7RF5TAA            | A823M15X7RF5TAA       | REEL                  |                  |
| 82000  | A823K15X7RF5UAA            | A823M15X7RF5UAA       | AMMO                  |                  |
| 100000   | A104K15X7RF5TAA            | A104M15X7RF5TAA       | REEL                  |                  |
| 100000   | A104K15X7RF5UAA            | A104M15X7RF5UAA       | AMMO                  |                  |
| 120000   | A124K20X7RF5TAA            | A124M20X7RF5TAA       | REEL                  |                  |



| <b>MONO-AXIAL X7R - 50 VDC CLEAR TEXT CODE</b> |                     |                 |                 |           |
|--|---------------------|-----------------|-----------------|-----------|
| CAP (pF)                                       | RATED VOLTAGE (Vdc) | 10 % TOLERANCE  | 20 % TOLERANCE  | PACKAGING |
| 120000   | 50 Vdc              | A124K20X7RF5UAA | A124M20X7RF5UAA | AMMO      |
| 150000   |                     | A154K20X7RF5TAA | A154M20X7RF5TAA | REEL      |
| 150000   |                     | A154K20X7RF5UAA | A154M20X7RF5UAA | AMMO      |
| 220000   |                     | A224K20X7RF5TAA | A224M20X7RF5TAA | REEL      |
| 220000   |                     | A224K20X7RF5UAA | A224M20X7RF5UAA | AMMO      |
| 330000   |                     | A334K20X7RF5TAA | A334M20X7RF5TAA | REEL      |
| 330000   |                     | A334K20X7RF5UAA | A334M20X7RF5UAA | AMMO      |
| 470000   |                     | A474K20X7RF5TAA | A474M20X7RF5TAA | REEL      |
| 470000   |                     | A474K20X7RF5UAA | A474M20X7RF5UAA | AMMO      |
| 680000   |                     | A684K20X7RF5TAA | A684M20X7RF5TAA | REEL      |
| 680000   |                     | A684K20X7RF5UAA | A684M20X7RF5UAA | AMMO      |
| 1000000  |                     | A105K20X7RF5TAA | A105M20X7RF5TAA | REEL      |
| 1000000  |                     | A105K20X7RF5UAA | A105M20X7RF5UAA | AMMO      |

| <b>MONO-AXIAL COG - 50 VDC CLEAR TEXT CODE</b> |                     |                 |                 |           |
|--|---------------------|-----------------|-----------------|-----------|
| CAP (pF)                                       | RATED VOLTAGE (VDC) | 5 % TOLERANCE   | 10 % TOLERANCE  | PACKAGING |
| 10   | 50 Vdc              | A100J15C0GF5TAA | A100K15C0GF5TAA | REEL      |
| 10   |                     | A100J15C0GF5UAA | A100K15C0GF5UAA | AMMO      |
| 12   |                     | A120J15C0GF5TAA | A120K15C0GF5TAA | REEL      |
| 12   |                     | A120J15C0GF5UAA | A120K15C0GF5UAA | AMMO      |
| 15   |                     | A150J15C0GF5TAA | A150K15C0GF5TAA | REEL      |
| 15   |                     | A150J15C0GF5UAA | A150K15C0GF5UAA | AMMO      |
| 18   |                     | A180J15C0GF5TAA | A180K15C0GF5TAA | REEL      |
| 18   |                     | A180J15C0GF5UAA | A180K15C0GF5UAA | AMMO      |
| 22   |                     | A220J15C0GF5TAA | A220K15C0GF5TAA | REEL      |
| 22   |                     | A220J15C0GF5UAA | A220K15C0GF5UAA | AMMO      |
| 27   |                     | A270J15C0GF5TAA | A270K15C0GF5TAA | REEL      |
| 27   |                     | A270J15C0GF5UAA | A270K15C0GF5UAA | AMMO      |
| 33   |                     | A330J15C0GF5TAA | A330K15C0GF5TAA | REEL      |
| 33   |                     | A330J15C0GF5UAA | A330K15C0GF5UAA | AMMO      |
| 39   |                     | A390J15C0GF5TAA | A390K15C0GF5TAA | REEL      |
| 39   |                     | A390J15C0GF5UAA | A390K15C0GF5UAA | AMMO      |
| 47   |                     | A470J15C0GF5TAA | A470K15C0GF5TAA | REEL      |
| 47   |                     | A470J15C0GF5UAA | A470K15C0GF5UAA | AMMO      |
| 56   |                     | A560J15C0GF5TAA | A560K15C0GF5TAA | REEL      |
| 56   |                     | A560J15C0GF5UAA | A560K15C0GF5UAA | AMMO      |
| 68   |                     | A680J15C0GF5TAA | A680K15C0GF5TAA | REEL      |
| 68   |                     | A680J15C0GF5UAA | A680K15C0GF5UAA | AMMO      |
| 82   |                     | A820J15C0GF5TAA | A820K15C0GF5TAA | REEL      |
| 82   |                     | A820J15C0GF5UAA | A820K15C0GF5UAA | AMMO      |
| 100  |                     | A101J15C0GF5TAA | A101K15C0GF5TAA | REEL      |
| 100  |                     | A101J15C0GF5UAA | A101K15C0GF5UAA | AMMO      |
| 120  |                     | A121J15C0GF5TAA | A121K15C0GF5TAA | REEL      |
| 120  |                     | A121J15C0GF5UAA | A121K15C0GF5UAA | AMMO      |
| 150  |                     | A151J15C0GF5TAA | A151K15C0GF5TAA | REEL      |
| 150  |                     | A151J15C0GF5UAA | A151K15C0GF5UAA | AMMO      |
| 180  |                     | A181J15C0GF5TAA | A181K15C0GF5TAA | REEL      |
| 180  |                     | A181J15C0GF5UAA | A181K15C0GF5UAA | AMMO      |
| 220  |                     | A221J15C0GF5TAA | A221K15C0GF5TAA | REEL      |
| 220  | A221J15C0GF5UAA     | A221K15C0GF5UAA | AMMO            |           |
| 270  | A271J15C0GF5TAA     | A271K15C0GF5TAA | REEL            |           |
| 270  | A271J15C0GF5UAA     | A271K15C0GF5UAA | AMMO            |           |
| 330  | A331J15C0GF5TAA     | A331K15C0GF5TAA | REEL            |           |



**Dipped Axial Multilayer Ceramic Capacitors  
for 50 - 100 Vdc**

| <b>MONO-AXIAL COG - 50 VDC CLEAR TEXT CODE</b> |                            |                      |                       |                  |
|--|----------------------------|----------------------|-----------------------|------------------|
| <b>CAP (pF)</b>                                | <b>RATED VOLTAGE (Vdc)</b> | <b>5 % TOLERANCE</b> | <b>10 % TOLERANCE</b> | <b>PACKAGING</b> |
| 330  | 50 Vdc                     | A331J15C0GF5UAA      | A331K15C0GF5UAA       | AMMO             |
| 390  |                            | A391J15C0GF5TAA      | A391K15C0GF5TAA       | REEL             |
| 390  |                            | A391J15C0GF5UAA      | A391K15C0GF5UAA       | AMMO             |
| 470  |                            | A471J15C0GF5TAA      | A471K15C0GF5TAA       | REEL             |
| 470  |                            | A471J15C0GF5UAA      | A471K15C0GF5UAA       | AMMO             |
| 560  |                            | A561J15C0GF5TAA      | A561K15C0GF5TAA       | REEL             |
| 560  |                            | A561J15C0GF5UAA      | A561K15C0GF5UAA       | AMMO             |
| 680  |                            | A681J15C0GF5TAA      | A681K15C0GF5TAA       | REEL             |
| 680  |                            | A681J15C0GF5UAA      | A681K15C0GF5UAA       | AMMO             |
| 820  |                            | A821J15C0GF5TAA      | A821K15C0GF5TAA       | REEL             |
| 820  |                            | A821J15C0GF5UAA      | A821K15C0GF5UAA       | AMMO             |
| 1000   |                            | A102J15C0GF5TAA      | A102K15C0GF5TAA       | REEL             |
| 1000   |                            | A102J15C0GF5UAA      | A102K15C0GF5UAA       | AMMO             |
| 1200   |                            | A122J15C0GF5TAA      | A122K15C0GF5TAA       | REEL             |
| 1200   |                            | A122J15C0GF5UAA      | A122K15C0GF5UAA       | AMMO             |
| 1500   |                            | A152J15C0GF5TAA      | A152K15C0GF5TAA       | REEL             |
| 1500   |                            | A152J15C0GF5UAA      | A152K15C0GF5UAA       | AMMO             |
| 1800   |                            | A182J15C0GF5TAA      | A182K15C0GF5TAA       | REEL             |
| 1800   |                            | A182J15C0GF5UAA      | A182K15C0GF5UAA       | AMMO             |
| 2200   |                            | A222J15C0GF5TAA      | A222K15C0GF5TAA       | REEL             |
| 2200   |                            | A222J15C0GF5UAA      | A222K15C0GF5UAA       | AMMO             |
| 2700   |                            | A272J20C0GF5TAA      | A272K20C0GF5TAA       | REEL             |
| 2700   |                            | A272J20C0GF5UAA      | A272K20C0GF5UAA       | AMMO             |
| 3300   |                            | A332J20C0GF5TAA      | A332K20C0GF5TAA       | REEL             |
| 3300   |                            | A332J20C0GF5UAA      | A332K20C0GF5UAA       | AMMO             |
| 3900   |                            | A392J20C0GF5TAA      | A392K20C0GF5TAA       | REEL             |
| 3900   |                            | A392J20C0GF5UAA      | A392K20C0GF5UAA       | AMMO             |
| 4700   |                            | A472J20C0GF5TAA      | A472K20C0GF5TAA       | REEL             |
| 4700   |                            | A472J20C0GF5UAA      | A472K20C0GF5UAA       | AMMO             |
| 5600   |                            | A562J20C0GF5TAA      | A562K20C0GF5TAA       | REEL             |
| 5600   | A562J20C0GF5UAA            | A562K20C0GF5UAA      | AMMO                  |                  |

| <b>MONO-AXIAL Y5V - 100 VDC CLEAR TEXT CODE</b> |                            |                               |                  |
|---|----------------------------|-------------------------------|------------------|
| <b>CAP (pF)</b>                                 | <b>RATED VOLTAGE (Vdc)</b> | <b>+ 80 /- 20 % TOLERANCE</b> | <b>PACKAGING</b> |
| 10000   | 100 Vdc                    | A103Z15Y5VH5TAA               | REEL             |
| 10000   |                            | A103Z15Y5VH5UAA               | AMMO             |
| 15000   |                            | A153Z15Y5VH5TAA               | REEL             |
| 15000   |                            | A153Z15Y5VH5UAA               | AMMO             |
| 22000   |                            | A223Z15Y5VH5TAA               | REEL             |
| 22000   |                            | A223Z15Y5VH5UAA               | AMMO             |
| 33000   |                            | A333Z15Y5VH5TAA               | REEL             |
| 33000   |                            | A333Z15Y5VH5UAA               | AMMO             |
| 47000   |                            | A473Z15Y5VH5TAA               | REEL             |
| 47000   |                            | A473Z15Y5VH5UAA               | AMMO             |
| 68000   |                            | A683Z15Y5VH5TAA               | REEL             |
| 68000   |                            | A683Z15Y5VH5UAA               | AMMO             |
| 100000  |                            | A104Z15Y5VH5TAA               | REEL             |
| 100000  |                            | A104Z15Y5VH5UAA               | AMMO             |
| 150000  |                            | A154Z20Y5VH5TAA               | REEL             |
| 150000  |                            | A154Z20Y5VH5UAA               | AMMO             |
| 220000  |                            | A224Z20Y5VH5TAA               | REEL             |
| 220000  |                            | A224Z20Y5VH5UAA               | AMMO             |



**MONO-AXIAL X7R - 100 VDC CLEAR TEXT CODE**

| CAP (pF) | RATED VOLTAGE (Vdc) | 10 % TOLERANCE  | 20 % TOLERANCE  | PACKAGING |
|----------|---------------------|-----------------|-----------------|-----------|
| 100      | 100 Vdc             | A101K15X7RH5TAA | A101M15X7RH5TAA | REEL      |
| 100      |                     | A101K15X7RH5UAA | A101M15X7RH5UAA | AMMO      |
| 120      |                     | A121K15X7RH5TAA | A121M15X7RH5TAA | REEL      |
| 120      |                     | A121K15X7RH5UAA | A121M15X7RH5UAA | AMMO      |
| 150      |                     | A151K15X7RH5TAA | A151M15X7RH5TAA | REEL      |
| 150      |                     | A151K15X7RH5UAA | A151M15X7RH5UAA | AMMO      |
| 180      |                     | A181K15X7RH5TAA | A181M15X7RH5TAA | REEL      |
| 180      |                     | A181K15X7RH5UAA | A181M15X7RH5UAA | AMMO      |
| 220      |                     | A221K15X7RH5TAA | A221M15X7RH5TAA | REEL      |
| 220      |                     | A221K15X7RH5UAA | A221M15X7RH5UAA | AMMO      |
| 270      |                     | A271K15X7RH5TAA | A271M15X7RH5TAA | REEL      |
| 270      |                     | A271K15X7RH5UAA | A271M15X7RH5UAA | AMMO      |
| 330      |                     | A331K15X7RH5TAA | A331M15X7RH5TAA | REEL      |
| 330      |                     | A331K15X7RH5UAA | A331M15X7RH5UAA | AMMO      |
| 390      |                     | A391K15X7RH5TAA | A391M15X7RH5TAA | REEL      |
| 390      |                     | A391K15X7RH5UAA | A391M15X7RH5UAA | AMMO      |
| 470      |                     | A471K15X7RH5TAA | A471M15X7RH5TAA | REEL      |
| 470      |                     | A471K15X7RH5UAA | A471M15X7RH5UAA | AMMO      |
| 560      |                     | A561K15X7RH5TAA | A561M15X7RH5TAA | REEL      |
| 560      |                     | A561K15X7RH5UAA | A561M15X7RH5UAA | AMMO      |
| 680      |                     | A681K15X7RH5TAA | A681M15X7RH5TAA | REEL      |
| 680      |                     | A681K15X7RH5UAA | A681M15X7RH5UAA | AMMO      |
| 820      |                     | A821K15X7RH5TAA | A821M15X7RH5TAA | REEL      |
| 820      |                     | A821K15X7RH5UAA | A821M15X7RH5UAA | AMMO      |
| 1000     |                     | A102K15X7RH5TAA | A102M15X7RH5TAA | REEL      |
| 1000     |                     | A102K15X7RH5UAA | A102M15X7RH5UAA | AMMO      |
| 1200     |                     | A122K15X7RH5TAA | A122M15X7RH5TAA | REEL      |
| 1200     |                     | A122K15X7RH5UAA | A122M15X7RH5UAA | AMMO      |
| 1500     |                     | A152K15X7RH5TAA | A152M15X7RH5TAA | REEL      |
| 1500     |                     | A152K15X7RH5UAA | A152M15X7RH5UAA | AMMO      |
| 1800     |                     | A182K15X7RH5TAA | A182M15X7RH5TAA | REEL      |
| 1800     |                     | A182K15X7RH5UAA | A182M15X7RH5UAA | AMMO      |
| 2200     | A222K15X7RH5TAA     | A222M15X7RH5TAA | REEL            |           |
| 2200     | A222K15X7RH5UAA     | A222M15X7RH5UAA | AMMO            |           |
| 2700     | A272K15X7RH5TAA     | A272M15X7RH5TAA | REEL            |           |
| 2700     | A272K15X7RH5UAA     | A272M15X7RH5UAA | AMMO            |           |
| 3300     | A332K15X7RH5TAA     | A332M15X7RH5TAA | REEL            |           |
| 3300     | A332K15X7RH5UAA     | A332M15X7RH5UAA | AMMO            |           |
| 3900     | A392K15X7RH5TAA     | A392M15X7RH5TAA | REEL            |           |
| 3900     | A392K15X7RH5UAA     | A392M15X7RH5UAA | AMMO            |           |
| 4700     | A472K15X7RH5TAA     | A472M15X7RH5TAA | REEL            |           |
| 4700     | A472K15X7RH5UAA     | A472M15X7RH5UAA | AMMO            |           |
| 5600     | A562K15X7RH5TAA     | A562M15X7RH5TAA | REEL            |           |
| 5600     | A562K15X7RH5UAA     | A562M15X7RH5UAA | AMMO            |           |
| 6800     | A682K15X7RH5TAA     | A682M15X7RH5TAA | REEL            |           |
| 6800     | A682K15X7RH5UAA     | A682M15X7RH5UAA | AMMO            |           |
| 8200     | A822K15X7RH5TAA     | A822M15X7RH5TAA | REEL            |           |
| 8200     | A822K15X7RH5UAA     | A822M15X7RH5UAA | AMMO            |           |
| 10000    | A103K15X7RH5TAA     | A103M15X7RH5TAA | REEL            |           |
| 10000    | A103K15X7RH5UAA     | A103M15X7RH5UAA | AMMO            |           |
| 12000    | A123K15X7RH5TAA     | A123M15X7RH5TAA | REEL            |           |
| 12000    | A123K15X7RH5UAA     | A123M15X7RH5UAA | AMMO            |           |



**Dipped Axial Multilayer Ceramic Capacitors  
for 50 - 100 Vdc**

| <b>MONO-AXIAL X7R - 100 VDC CLEAR TEXT CODE</b> |                            |                       |                       |                  |
|---|----------------------------|-----------------------|-----------------------|------------------|
| <b>CAP (pF)</b>                                 | <b>RATED VOLTAGE (Vdc)</b> | <b>10 % TOLERANCE</b> | <b>20 % TOLERANCE</b> | <b>PACKAGING</b> |
| 15000   | 100 Vdc                    | A153K15X7RH5TAA       | A153M15X7RH5TAA       | REEL             |
| 15000   |                            | A153K15X7RH5UAA       | A153M15X7RH5UAA       | AMMO             |
| 18000   |                            | A183K15X7RH5TAA       | A183M15X7RH5TAA       | REEL             |
| 18000   |                            | A183K15X7RH5UAA       | A183M15X7RH5UAA       | AMMO             |
| 22000   |                            | A223K15X7RH5TAA       | A223M15X7RH5TAA       | REEL             |
| 22000   |                            | A223K15X7RH5UAA       | A223M15X7RH5UAA       | AMMO             |
| 27000   |                            | A273K20X7RH5TAA       | A273M20X7RH5TAA       | REEL             |
| 27000   |                            | A273K20X7RH5UAA       | A273M20X7RH5UAA       | AMMO             |
| 33000   |                            | A333K20X7RH5TAA       | A333M20X7RH5TAA       | REEL             |
| 33000   |                            | A333K20X7RH5UAA       | A333M20X7RH5UAA       | AMMO             |
| 39000   |                            | A393K20X7RH5TAA       | A393M20X7RH5TAA       | REEL             |
| 39000   |                            | A393K20X7RH5UAA       | A393M20X7RH5UAA       | AMMO             |
| 47000   |                            | A473K20X7RH5TAA       | A473M20X7RH5TAA       | REEL             |
| 47000   |                            | A473K20X7RH5UAA       | A473M20X7RH5UAA       | AMMO             |
| 56000   |                            | A563K20X7RH5TAA       | A563M20X7RH5TAA       | REEL             |
| 56000   |                            | A563K20X7RH5UAA       | A563M20X7RH5UAA       | AMMO             |
| 68000   |                            | A683K20X7RH5TAA       | A683M20X7RH5TAA       | REEL             |
| 68000   |                            | A683K20X7RH5UAA       | A683M20X7RH5UAA       | AMMO             |
| 82000   |                            | A823K20X7RH5TAA       | A823M20X7RH5TAA       | REEL             |
| 82000   |                            | A823K20X7RH5UAA       | A823M20X7RH5UAA       | AMMO             |
| 100000  | A104K20X7RH5TAA            | A104M20X7RH5TAA       | REEL                  |                  |
| 100000  | A104K20X7RH5UAA            | A104M20X7RH5UAA       | AMMO                  |                  |

| <b>MONO-AXIAL COG - 100 VDC V CLEAR TEXT CODE</b> |                            |                      |                       |                  |
|---|----------------------------|----------------------|-----------------------|------------------|
| <b>CAP (pF)</b>                                   | <b>RATED VOLTAGE (Vdc)</b> | <b>5 % TOLERANCE</b> | <b>10 % TOLERANCE</b> | <b>PACKAGING</b> |
| 10  | 100 Vdc                    | A100J15C0GH5TAA      | A100K15C0GH5TAA       | REEL             |
| 10  |                            | A100J15C0GH5UAA      | A100K15C0GH5UAA       | AMMO             |
| 12  |                            | A120J15C0GH5TAA      | A120K15C0GH5TAA       | REEL             |
| 12  |                            | A120J15C0GH5UAA      | A120K15C0GH5UAA       | AMMO             |
| 15  |                            | A150J15C0GH5TAA      | A150K15C0GH5TAA       | REEL             |
| 15  |                            | A150J15C0GH5UAA      | A150K15C0GH5UAA       | AMMO             |
| 18  |                            | A180J15C0GH5TAA      | A180K15C0GH5TAA       | REEL             |
| 18  |                            | A180J15C0GH5UAA      | A180K15C0GH5UAA       | AMMO             |
| 22  |                            | A220J15C0GH5TAA      | A220K15C0GH5TAA       | REEL             |
| 22  |                            | A220J15C0GH5UAA      | A220K15C0GH5UAA       | AMMO             |
| 27  |                            | A270J15C0GH5TAA      | A270K15C0GH5TAA       | REEL             |
| 27  |                            | A270J15C0GH5UAA      | A270K15C0GH5UAA       | AMMO             |
| 33  |                            | A330J15C0GH5TAA      | A330K15C0GH5TAA       | REEL             |
| 33  |                            | A330J15C0GH5UAA      | A330K15C0GH5UAA       | AMMO             |
| 39  |                            | A390J15C0GH5TAA      | A390K15C0GH5TAA       | REEL             |
| 39  |                            | A390J15C0GH5UAA      | A390K15C0GH5UAA       | AMMO             |
| 47  |                            | A470J15C0GH5TAA      | A470K15C0GH5TAA       | REEL             |
| 47  |                            | A470J15C0GH5UAA      | A470K15C0GH5UAA       | AMMO             |
| 56  |                            | A560J15C0GH5TAA      | A560K15C0GH5TAA       | REEL             |
| 56  |                            | A560J15C0GH5UAA      | A560K15C0GH5UAA       | AMMO             |
| 68  | A680J15C0GH5TAA            | A680K15C0GH5TAA      | REEL                  |                  |
| 68  | A680J15C0GH5UAA            | A680K15C0GH5UAA      | AMMO                  |                  |
| 82  | A820J15C0GH5TAA            | A820K15C0GH5TAA      | REEL                  |                  |
| 82  | A820J15C0GH5UAA            | A820K15C0GH5UAA      | AMMO                  |                  |
| 100   | A101J15C0GH5TAA            | A101K15C0GH5TAA      | REEL                  |                  |
| 100   | A101J15C0GH5UAA            | A101K15C0GH5UAA      | AMMO                  |                  |
| 120   | A121J15C0GH5TAA            | A121K15C0GH5TAA      | REEL                  |                  |





| <b>MONO-AXIAL COG - 100 VDC V CLEAR TEXT CODE</b> |                            |                      |                       |                  |
|---|----------------------------|----------------------|-----------------------|------------------|
| <b>CAP (pF)</b>                                   | <b>RATED VOLTAGE (Vdc)</b> | <b>5 % TOLERANCE</b> | <b>10 % TOLERANCE</b> | <b>PACKAGING</b> |
| 120   | 100 Vdc                    | A121J15C0GH5UAA      | A121K15C0GH5UAA       | AMMO             |
| 150   |                            | A151J15C0GH5TAA      | A151K15C0GH5TAA       | REEL             |
| 150   |                            | A151J15C0GH5UAA      | A151K15C0GH5UAA       | AMMO             |
| 180   |                            | A181J15C0GH5TAA      | A181K15C0GH5TAA       | REEL             |
| 180   |                            | A181J15C0GH5UAA      | A181K15C0GH5UAA       | AMMO             |
| 220   |                            | A221J15C0GH5TAA      | A221K15C0GH5TAA       | REEL             |
| 220   |                            | A221J15C0GH5UAA      | A221K15C0GH5UAA       | AMMO             |
| 270   |                            | A271J15C0GH5TAA      | A271K15C0GH5TAA       | REEL             |
| 270   |                            | A271J15C0GH5UAA      | A271K15C0GH5UAA       | AMMO             |
| 330   |                            | A331J15C0GH5TAA      | A331K15C0GH5TAA       | REEL             |
| 330   |                            | A331J15C0GH5UAA      | A331K15C0GH5UAA       | AMMO             |
| 390   |                            | A391J15C0GH5TAA      | A391K15C0GH5TAA       | REEL             |
| 390   |                            | A391J15C0GH5UAA      | A391K15C0GH5UAA       | AMMO             |
| 470   |                            | A471J15C0GH5TAA      | A471K15C0GH5TAA       | REEL             |
| 470   |                            | A471J15C0GH5UAA      | A471K15C0GH5UAA       | AMMO             |
| 560   |                            | A561J15C0GH5TAA      | A561K15C0GH5TAA       | REEL             |
| 560   |                            | A561J15C0GH5UAA      | A561K15C0GH5UAA       | AMMO             |
| 680   |                            | A681J15C0GH5TAA      | A681K15C0GH5TAA       | REEL             |
| 680   |                            | A681J15C0GH5UAA      | A681K15C0GH5UAA       | AMMO             |
| 820   |                            | A821J15C0GH5TAA      | A821K15C0GH5TAA       | REEL             |
| 820   |                            | A821J15C0GH5UAA      | A821K15C0GH5UAA       | AMMO             |
| 1000  |                            | A102J20C0GH5TAA      | A102K20C0GH5TAA       | REEL             |
| 1000  |                            | A102J20C0GH5UAA      | A102K20C0GH5UAA       | AMMO             |
| 1200  |                            | A122J20C0GH5TAA      | A122K20C0GH5TAA       | REEL             |
| 1200  |                            | A122J20C0GH5UAA      | A122K20C0GH5UAA       | AMMO             |
| 1500  |                            | A152J20C0GH5TAA      | A152K20C0GH5TAA       | REEL             |
| 1500  |                            | A152J20C0GH5UAA      | A152K20C0GH5UAA       | AMMO             |
| 1800  |                            | A182J20C0GH5TAA      | A182K20C0GH5TAA       | REEL             |
| 1800  |                            | A182J20C0GH5UAA      | A182K20C0GH5UAA       | AMMO             |
| 2200  |                            | A222J20C0GH5TAA      | A222K20C0GH5TAA       | REEL             |
| 2200  |                            | A222J20C0GH5UAA      | A222K20C0GH5UAA       | AMMO             |
| 2700  |                            | A272J20C0GH5TAA      | A272K20C0GH5TAA       | REEL             |
| 2700  | A272J20C0GH5UAA            | A272K20C0GH5UAA      | AMMO                  |                  |
| 3300  | A332J20C0GH5TAA            | A332K20C0GH5TAA      | REEL                  |                  |
| 3300  | A332J20C0GH5UAA            | A332K20C0GH5UAA      | AMMO                  |                  |
| 3900  | A392J20C0GH5TAA            | A392K20C0GH5TAA      | REEL                  |                  |
| 3900  | A392J20C0GH5UAA            | A392K20C0GH5UAA      | AMMO                  |                  |
| 4700  | A472J20C0GH5TAA            | A472K20C0GH5TAA      | REEL                  |                  |
| 4700  | A472J20C0GH5UAA            | A472K20C0GH5UAA      | AMMO                  |                  |
| 5600  | A562J20C0GH5TAA            | A562K20C0GH5TAA      | REEL                  |                  |
| 5600  | A562J20C0GH5UAA            | A562K20C0GH5UAA      | AMMO                  |                  |



## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А