

**Specification Details:**

Date: 3/12/2009

Specification: MIL-PRF-123  
 Title: Capacitor, Fixed, Ceramic Dielectric, (Temperature Stable and General Purpose)  
 Federal Supply Class (FSC): 5910  
 Conventional: Yes  
 Specification contains quality assurance program: No  
 MIL-STD-790 Established Reliability & High Reliability: No  
 MIL-STD-690 Failure Rate Sampling Plans & Procedures: No  
 Weibull Graded: No  
 Specification contains space level reliability requirements: Yes  
 Specification allows test optimization: No

**Contact Information:**

DSCC Office of Primary Involvement: Passive Devices Team, DSCC-VQP  
 Primary DSCC-VQ Contact: 614-692-0597, e-mail: vqp.jz@dla.mil  
 Secondary DSCC-VQ Contact: 614-692-0666, e-mail: vqp.mp@dla.mil

**Notes:**

N/A

**Part Configuration:****M123A01BXB103KC**

| Performance Specification Number | Modification | Slash Sheet Number | Characteristic | Voltage | Capacitance Value | Capacitance Tolerance | Termination |
|----------------------------------|--------------|--------------------|----------------|---------|-------------------|-----------------------|-------------|
| M123                             | A            | 01                 | BX             | B       | 103               | K                     | C           |

**Part Listings:**

| GOVERNMENT DESIGNATION | MANUFACTURER'S DESIGNATION OR TYPE NUMBER | TEST OR QUALIFICATION REFERENCE | SPECIFICATION SHEET | SUPPLIER'S NAME (ADDRESS ON LAST PAGE) |
|------------------------|-------------------------------------------|---------------------------------|---------------------|----------------------------------------|
|------------------------|-------------------------------------------|---------------------------------|---------------------|----------------------------------------|

**CKS05**

|                                                                                                                  |       |                                        |    |                                    |
|------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------|----|------------------------------------|
| 4.7 thru 10000pF; tols. C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C | MR05  | 123-197-02<br>20-395-88<br>39014-28-96 | /1 | AVX Avio Excelente S.A. de C.V.    |
| 4.7 thru 10000pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. C      | MR05  | 123-392-89                             | /1 | AVX Corporation (Myrtle Beach, SC) |
| 4.7 thru 10000pF; tols. C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C | C052Z | 123-178-85<br>20-1102-73<br>20-389-88  | /1 | Kemet Electronics Corp             |

**CKS06**

|                                                                                                              |       |                                                     |    |                                    |
|--------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------|----|------------------------------------|
| 270 thru 470000pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C  | MR06  | 123-197-02<br>20-395-88<br>39014-28-96              | /2 | AVX Avio Excelente S.A. de C.V.    |
| 270 thru 470000pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. C       | MR06  | 123-393-89                                          | /2 | AVX Corporation (Myrtle Beach, SC) |
| 270 thru 1000000pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C | C062Z | 123-179-85<br>123-078-99<br>20-1102-73<br>20-390-88 | /2 | Kemet Electronics Corp             |

**CKS07**

|                                                                                                               |       |                                        |    |                        |
|---------------------------------------------------------------------------------------------------------------|-------|----------------------------------------|----|------------------------|
| 2200 thru 1000000pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C | C512Z | 123-996-87<br>123-838-93<br>20-1103-73 | /3 | Kemet Electronics Corp |
|---------------------------------------------------------------------------------------------------------------|-------|----------------------------------------|----|------------------------|

**CKS11**

|                                                                                                                  |      |                         |    |                                    |
|------------------------------------------------------------------------------------------------------------------|------|-------------------------|----|------------------------------------|
| 1 thru 4700pF; tols. B, C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W | MA10 | 123-395-89<br>20-143-74 | /4 | AVX Corporation (Myrtle Beach, SC) |
|------------------------------------------------------------------------------------------------------------------|------|-------------------------|----|------------------------------------|

| GOVERNMENT<br>DESIGNATION                                                                                             | MANUFACTURER'S<br>DESIGNATION OR<br>TYPE NUMBER | TEST OR<br>QUALIFICATION<br>REFERENCE      | SPECIFI-<br>CATION<br>SHEET | SUPPLIER'S NAME<br>(ADDRESS ON LAST PAGE) |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-----------------------------|-------------------------------------------|
| <b>CKS12</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 82 thru 10000pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W             | MA20                                            | 123-396-89<br>20-143-74                    | /5                          | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS14</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 150 thru 47000pF; tols. F, J, K; in 50, 100, 200 volts; BP rated temp. and volt. temp. limits; term. W                | MA40                                            | 123-397-89<br>20-143-74                    | /6                          | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS15</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 820 thru 180000pF; tols. F, J, K; in 50, 100, 200 volts; BP rated temp. and volt. temp. limits; term. W               | MA50                                            | 123-398-89<br>20-143-74                    | /7                          | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS16</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 2400 thru 1000000pF; tols. F, J, K; in 50, 100, 200 volts; BP rated temp. and volt. temp. limits; term. W             | MA60                                            | 123-399-89<br>20-143-74                    | /8                          | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS22</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 1 thru 100000pF; tols. D, F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. C            | MD10                                            | 123-418-90                                 | /16                         | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS23</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 560 thru 220000pF; tols. F, J, K, M; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C        | MD02                                            | 123-419-90                                 | /17                         | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS24</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 120000 thru 470000pF; tols. K, M; in 50, 100 volts; BR rated temp. and volt. temp. limits; term. C                    | MD03                                            | 123-420-90                                 | /18                         | AVX Corporation (Myrtle Beach, SC)        |
| <b>CKS51</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 1 thru 18000pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, W, Z       | C0805Z                                          | 123-1002-87<br>55681-345-85<br>123-1920-07 | /10                         | Kemet Electronics Corp                    |
| 1 thru 18000pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z       | CKS51                                           | 123-020-99<br>55681-049-00                 | /10                         | Presidio Components, Inc.                 |
| <b>CKS52</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 300 thru 100000pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, W, Z       | C1210Z                                          | 123-1003-87<br>55681-347-85<br>123-1921-07 | /11                         | Kemet Electronics Corp                    |
| 300 thru 100000pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z       | CKS52                                           | 55681-049-00                               | /11                         | Presidio Components, Inc.                 |
| <b>CKS53</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 300 thru 100000pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, W, Z          | C1808Z                                          | 123-1004-87<br>55681-889-73<br>123-1922-07 | /12                         | Kemet Electronics Corp                    |
| 300 thru 68000pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z           | CKS53                                           | 55681-660-85                               | /12                         | Presidio Components, Inc.                 |
| <b>CKS54</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 1100 thru 1000000pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. S, W, Z             | C2225Z                                          | 123-1005-87<br>55681-1994-07               | /13                         | Kemet Electronics Corp                    |
| 1100 thru 470000pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z              | CKS54                                           | 681-049-00                                 | /13                         | Presidio Components, Inc.                 |
| <b>CKS55</b>                                                                                                          |                                                 |                                            |                             |                                           |
| 1 thru 39000pF; tols. B, C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, W, Z    | C1206Z                                          | 55681-346-85<br>123-1923-07                | /21                         | Kemet Electronics Corp                    |
| 1 thru 39000pF; tols. B, C, D, F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z | CKS55                                           | 55681-049-00                               | /21                         | Presidio Components, Inc.                 |

| GOVERNMENT<br>DESIGNATION                                                                                           | MANUFACTURER'S<br>DESIGNATION OR<br>TYPE NUMBER | TEST OR<br>QUALIFICATIO<br>N REFERENCE | SPECIFI-<br>CATION<br>SHEET | SUPPLIER'S NAME<br>(ADDRESS ON LAST PAGE) |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------|-----------------------------|-------------------------------------------|
| <b>CKS56</b>                                                                                                        |                                                 |                                        |                             |                                           |
| 1200 thru 180000pF; tols. F, J, K, M; in 50, 100 volts;<br>BP, BX rated temp. and volt. temp. limits; term. S, W, Z | C1812Z                                          | 55681-348-85<br>123-1924-07            | /22                         | Kemet Electronics Corp                    |
| 1200 thru 4700pF; tols. F, J, K; in 100 volts; BP rated<br>temp. and volt. temp. limits; term. M, S, Z              | CKS56                                           | 55681-049-00                           | /22                         | Presidio Components, Inc.                 |
| 27 thru 180000pF; tols. K, M; in 50, 100 volts; BX rated<br>temp. and volt. temp. limits; term. M, S, Z             | CKS56                                           | 55681-049-00                           | /22                         | Presidio Components, Inc.                 |
| <b>CKS57</b>                                                                                                        |                                                 |                                        |                             |                                           |
| 3900 thru 470000pF; tols. F, J, K, M; in 50, 100 volts;<br>BP, BX rated temp. and volt. temp. limits; term. S, W, Z | C1825Z                                          | 55681-349-85<br>55681-1989-07          | /23                         | Kemet Electronics Corp                    |
| 3900 thru 470000pF; tols. F, J, K, M; in 50, 100 volts;<br>BP, BX rated temp. and volt. temp. limits; term. M, S, Z | CKS57                                           | 55681-049-00                           | /23                         | Presidio Components, Inc.                 |

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**Manufacturer and Supplier Location Information**

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**Manufacturer: AVX Avio Excelente S.A. de C.V. (CAGE Code: S9915)**

Location: Area Riberena, APDO Post 1709, CP 32310 Ciudad, Juarez, Chihuahua, Mexico

Plant Location: Same Address as Manufacturer

**Manufacturer: AVX Corporation (Myrtle Beach, SC) (CAGE Code: 04222)**

Location: Ceramics Division, 17 Avenue South, Myrtle Beach, SC 29578-0867, US

Plant Location: 8021 Highway 501 /west, Conway, SC 29526, US

**Manufacturer: Kemet Electronics Corp (CAGE Code: 31433)**

Location: 2835 Kemet Way, Simpsonville, SC 29681-2457, US

Plant Location: Kemet de Mexico, S.A. de C.V., Avenida Eloy Cavazos 7908 Ote., Col. Rancho Viejo, Guadalupe, N.L., Mexico

**Manufacturer: Presidio Components, Inc. (CAGE Code: 60212)**

Location: 7169 Construction Court, San Diego, CA 92138, US

Plant Location: Same Address as Manufacturer