**Specification Details:** **Date: 1/28/2021**

Specification: MIL-PRF-123
Title: Capacitor, Fixed, Ceramic Dielectric, (Temperature Stable and General Purpose)
Federal Supply Class (FSC): 5910
Conventional: No
Specification contains quality assurance program: No
MIL-STD-790 Established Reliability & High Reliability: Yes
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:**

Office of Primary Involvement: Passive Devices Branch, DLA Land and Maritime - VQP
Primary Qualifying Activity Contact: 614-692-3757, e-mail: vqp.dl@dla.mil
Secondary Qualifying Activity Contact: 614-692-0609, e-mail: vqp.do@dla.mil

**Notes:**

N/A

**Part Configuration:**

M123A01BXB103KC

| Performance Specification Number | Product Level | 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 | SPECIFI-CATION SHEET | SUPPLIER'S NAME (ADDRESS ON LAST PAGE) |
|---|---|---|---|---|
| **CKS05** | | | | |
| 4.7 pF thru 10000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MR05 | 123-392-89 | /1 | AVX Corporation<br>Avio Excelente SA de CV |
| 4.7 pF thru 10000 pF; tols. C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MR05 | 123-197-02; 20-395-88; 39014-28-96 | /1 | AVX Corporation<br>Avio Excelente SA de CV |
| 4.7 pF thru 10000 pF; tols. C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | C052Z | 123-178-85; 20-1102-73; 20-389-88 | /1 | Kemet Electronics Corp |
| **CKS06** | | | | |
| 270 pF thru 470000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MR06 | 123-393-89 | /2 | AVX Corporation<br>Avio Excelente SA de CV |
| 270 pF thru 1000000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MR06 | 123-197-02; 123-3306-11; 20-395-88; 39014-28-96 | /2 | AVX Corporation<br>Avio Excelente SA de CV |
| 270 pF thru 1000000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | C062Z | 123-078-99; 123-179-85; 20-1102-73; 20-390-88 | /2 | Kemet Electronics Corp |
| **CKS07** | | | | |
| 2200 pF thru 1000000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | C512Z | 123-838-93; 123-996-87; 20-1103-73 | /3 | Kemet Electronics Corp |

| GOVERNMENT DESIGNATION | MANUFACTURER'S DESIGNATION OR TYPE NUMBER | TEST OR QUALIFICATION REFERENCE | SPECIFI-CATION SHEET | SUPPLIER'S NAME (ADDRESS ON LAST PAGE) |
|---|---|---|---|---|
| **CKS11** | | | | |
| 1 pF thru 4700 pF; tols. B, C, D, F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W; Product levels A | MA10 | 123-395-89; 20-143-74 | /4 | AVX Corporation<br>Avio Excelente SA de CV |
| **CKS12** | | | | |
| 82 pF thru 10000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W; Product levels A | MA20 | 123-396-89; 20-143-74 | /5 | AVX Corporation<br>Avio Excelente SA de CV |
| **CKS14** | | | | |
| 150 pF thru 47000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W; Product levels A | MA40 | 123-397-89; 20-143-74 | /6 | AVX Corporation<br>Avio Excelente SA de CV |
| **CKS15** | | | | |
| 820 pF thru 180000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W; Product levels A | MA50 | 123-398-89; 20-143-74 | /7 | Avio Excelente SA de CV<br>AVX Corporation |
| **CKS16** | | | | |
| 2400 pF thru 1000000 pF; tols. F, J, K; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. W; Product levels A | MA60 | 123-399-89; 20-143-74 | /8 | Avio Excelente SA de CV<br>AVX Corporation |
| **CKS22** | | | | |
| 1 pF thru 100000 pF; tols. D, F, J, K, M; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MD10 | 123-418-90 | /16 | AVX Corporation (Myrtle Beach, SC)<br>AVX Corporation |
| **CKS23** | | | | |
| 560 pF thru 220000 pF; tols. F, J, K, M; in 50, 100, 200 volts; BP, BX rated temp. and volt. temp. limits; term. C; Product levels A | MD02 | 123-419-90 | /17 | AVX Corporation (Myrtle Beach, SC)<br>AVX Corporation |
| **CKS24** | | | | |
| 120000 pF thru 1000000 pF; tols. K, M; in 50, 100 volts; BR, BX rated temp. and volt. temp. limits; term. C; Product levels A | MD03 | 123-3367-11; 123-420-90 | /18 | AVX Corporation (Myrtle Beach, SC)<br>AVX Corporation |
| **CKS51** | | | | |
| 1 pF thru 18000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 0805 | 123-4744-16 | /10 | AVX Corporation |
| 1 pF thru 18000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 0805 | 123-2720-10 | /10 | AVX Corporation |
| 1 pF thru 18000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C0805Z | 123-1002-87; 123-1920-07; 55681-345-85 | /10 | Kemet Electronics Corp |
| 1 pF thru 18000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS51 | 123-020-99; 55681-049-00 | /10 | Presidio Components, Inc. |
| 1 pF thru 18000 pF; tols. C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A | VJ0805 | 123-3972-13 | /10 | Vishay Israel - Migdal Ha'Emek |
| **CKS52** | | | | |
| 300 pF thru 100000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 1210 | 123-4744-16 | /11 | AVX Corporation |

| GOVERNMENT DESIGNATION | MANUFACTURER'S DESIGNATION OR TYPE NUMBER | TEST OR QUALIFICATION REFERENCE | SPECIFI-CATION SHEET | SUPPLIER'S NAME (ADDRESS ON LAST PAGE) |
|---|---|---|---|---|
| 300 pF thru 100000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 1210 | 123-2720-10 | /11 | AVX Corporation |
| 300 pF thru 100000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C1210Z | 123-1003-87; 123-1921-07; 55681-347-85 | /11 | Kemet Electronics Corp |
| 300 pF thru 100000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS52 | 55681-049-00 | /11 | Presidio Components, Inc. |
| 300 pF thru 100000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A | VJ1210 | 123-3972-13 | /11 | Vishay Israel - Migdal Ha'Emek |
| **CKS53** | | | | |
| 300 pF thru 100000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 1808 | 123-4744-16 | /12 | AVX Corporation |
| 300 pF thru 100000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 1808 | 123-2720-10 | /12 | AVX Corporation |
| 300 pF thru 100000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C1808Z | 123-1004-87; 123-1922-07; 55681-889-73 | /12 | Kemet Electronics Corp |
| 300 pF thru 100000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS53 | 123-3314-11; 55681-660-85 | /12 | Presidio Components, Inc. |
| 300 pF thru 18000 pF; tols. F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A | VJ1808 | 123-3972-13 | /12 | Vishay Israel - Migdal Ha'Emek |
| **CKS54** | | | | |
| 1100 pF thru 1000000 pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS54 | 123-4744-16 | /13 | AVX Corporation |
| 1100 pF thru 1000000 pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS54 | 123-2723-10 | /13 | AVX Corporation |
| 1100 pF thru 1000000 pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C2225Z | 123-1005-87; 55681-1994-07 | /13 | Kemet Electronics Corp |
| 1100 pF thru 1000000 pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS54 | 123-3313-11; 681-049-00 | /13 | Presidio Components, Inc. |
| 1100 pF thru 470000 pF; tols. F, J, K; in 50 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | 2225 | 123-4493-15 | /13 | Vishay Israel - Migdal Ha'Emek |
| **CKS55** | | | | |
| 1 pF thru 39000 pF; tols. B, C, D, F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS55 | 123-4744-16 | /21 | AVX Corporation |
| 1 pF thru 39000 pF; tols. B, C, D, F, J, K, M, ; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS55 | 123-2724-10 | /21 | AVX Corporation |
| 1 pF thru 39000 pF; tols. B, C, D, F, J, K; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C1206Z | 123-1923-07; 55681-346-85 | /21 | Kemet Electronics Corp |

| GOVERNMENT DESIGNATION | MANUFACTURER'S DESIGNATION OR TYPE NUMBER | TEST OR QUALIFICATION REFERENCE | SPECIFI-CATION SHEET | SUPPLIER'S NAME (ADDRESS ON LAST PAGE) |
|---|---|---|---|---|
| 1 pF thru 39000 pF; tols. B, C, D, F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS55 | 55681-049-00 | /21 | Presidio Components, Inc. |
| 1 pF thru 39000 pF; tols. D, F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A | VJ1206 | 123-3972-13 | /21 | Vishay Israel - Migdal Ha'Emek |
| **CKS56** | | | | |
| 1200 pF thru 180000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS56 | 123-4744-16 | /22 | AVX Corporation |
| 1200 pF thru 180000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS56 | 123-2725-10 | /22 | AVX Corporation |
| 1200 pF thru 180000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C1812Z | 123-1924-07; 55681-348-85 | /22 | Kemet Electronics Corp |
| 1200 pF thru 4700 pF; tols. F, J, K; in 100 volts; BP rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS56 | 55681-049-00 | /22 | Presidio Components, Inc. |
| 27 pF thru 180000 pF; tols. K, M; in 50, 100 volts; BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS56 | 55681-049-00 | /22 | Presidio Components, Inc. |
| 5100 pF thru 10000 pF; tols. F, J, K; in 50 volts; BP rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS56 | 55681-049-00 | /22 | Presidio Components, Inc. |
| 1200 pF thru 180000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | VJ1812 | 123-4493-15 | /22 | Vishay Israel - Migdal Ha'Emek |
| **CKS57** | | | | |
| 3900 pF thru 470000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS57 | 123-4744-16 | /23 | AVX Corporation |
| 3900 pF thru 470000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. G, M, S, Z; Product levels A | CKS57 | 123-2726-10 | /23 | AVX Corporation |
| 3900 pF thru 470000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. S, Z; Product levels A | C1825Z | 55681-1989-07; 55681-349-85 | /23 | Kemet Electronics Corp |
| 3900 pF thru 470000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A, T | CKS57 | 55681-049-00 | /23 | Presidio Components, Inc. |
| 3900 pF thru 470000 pF; tols. F, J, K, M; in 50, 100 volts; BP, BX rated temp. and volt. temp. limits; term. M, S, Z; Product levels A | VJ1825 | 123-3972-13 | /23 | Vishay Israel - Migdal Ha'Emek |

## Manufacturer and Supplier Location Information

**Manufacturer: AVX Corporation (CAGE Code: 6KUV2)**
Location: One AVX Blvd, Fountain Inn, SC 29644-9039, US

Plants:

1. Plant: Same Address as Manufacturer
2. Avio Excelente SA de CV, CAGE: S9915, Avenida San Lorenzo 651, Parque Industrial Omega CP, 32410, Cd. Juarez, Chihuahua, Mexico
3. AVX Corporation (Myrtle Beach, SC), CAGE: 04222, 2200 AVX Dr., Myrtle Beach, SC 29577,

**Manufacturer: Kemet Electronics Corporation (CAGE Code: 31433)**
Location: 2835 Kemet Way, Simpsonville, SC 29681-2457, US

Plants:

1. Kemet de Mexico, S.A. de C.V., Avenida Eloy Cavazos 7908 Ote., Col. Rancho Viejo, Guadalupe, N.L., C.P. 61750, MX

**Manufacturer: Presidio Components, Inc. (CAGE Code: 60212)**
Location: 7169 Construction Court, San Diego, CA 92121, US

Plants:

1. Plant: Same Address as Manufacturer

**Manufacturer: Vishay Israel - Migdal Ha'Emek (CAGE Code: 2770A)**
Location: 2 Ramat Gabriel, Migdal Ha'Emek, 10500, Israel

Plants:

1. Plant: Same Address as Manufacturer