

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## FEATURE

- Self-Healing Property
- Dielectric: Metallized Polypropylene Film
- Winding: Non-Inductive Type
- Over Voltage Stress Withstanding
- Flammability Classification 94V-0
- UL/cUL Safety Approved: Certification No: E197475



## PART NUMBERING SYSTEM

MEX    223    K    480V    XXXX  
(1)    (2)    (3)    (4)    (5)



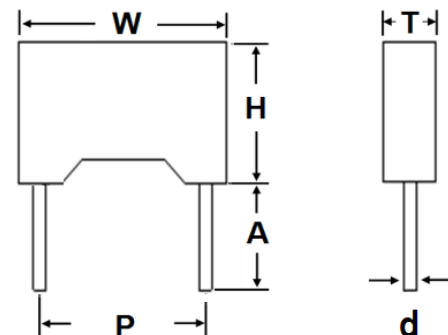
| No  | Item           | Digit | Description                    | Reference  |
|-----|----------------|-------|--------------------------------|--|
| (1) | Meritek Series | MEX   | EMI Suppression Capacitors     | X2 Safety Cap                                    |
| (2) | Capacitance    | 223   | 223: 22000pF                   | First two digits: Significant, Third: Multiplier |
| (3) | Tolerance      | K     | K: $\pm 10\%$                  | -10%~+10%  |
| (4) | Rated Voltage  | 480V  | 480V: 480VAC                   | 330V:330VAC, 440V:440VAC, 480V: 480VAC           |
| (5) | Internal Code  | xxxx  | Pitch or Internal control code | Internal Control or project reference            |

## SPECIFICATIONS

| Item   | Characteristic                            |   |
|--|---|---|
| Operating Temperature Range  | -40°C ~ +110°C                            |   |
| Rated Voltage , Climate Category   | 480VAC at 50~60Hz,                        | 40/110/56/B   |
| Capacitance, Tolerance   | 0.001 $\mu$ F ~ 10.0 $\mu$ F              | $\pm 5\%$ (J), $\pm 10\%$ (K), $\pm 20\%$ (M)                         |
| Dissipation Factor (tan $\delta$ )   | $\leq 0.1\%$                              | at 1KHz $\pm 2\%$ , $\leq 1.0V_{RMS}$                                 |
| Insulation resistance<br>at 100V <sub>DC</sub> , Change Time: 60s $\pm 5s$ | $\geq 15,000M\Omega$ (C $\leq 0.33\mu$ F) | $\geq 5,000M\Omega \cdot \mu$ F/C (C>0.33 $\mu$ F)                    |
| Withstanding Voltage   | <b>Between Terminals</b>                  | <b>Between Terminals and Case</b>                                     |
|  | 4.3*U <sub>rDC</sub> for 60s              | 2*U <sub>r</sub> +1.5KV <sub>AC</sub> for 2~5s, Min 2KV <sub>AC</sub> |

## DIMENSION

| P (mm) | d (mm) | W, H, T (mm)       |
|--------|--------|--------------------|
| 7.5    | 0.6    | See Table Attached |
| 10.0   | 0.6    |                    |
| 15.0   | 0.6    |                    |
| 22.5   | 0.8    |                    |
| 27.5   | 0.8    |                    |
| 32.5   | 0.8    |                    |
| 37.5   | 1.0    |                    |
| 47.5   | 1.0    |                    |



Note:

1. Standard lead length A: 15mm min.
2. Contact Meritek for other available options for lead forming or assembly

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 480VAC

| Part Number   | Cap Code | Cap        | Tol   | Volt               | W    | H    | T    | P    | d    | Safety      |
|---------------|----------|------------|-------|--------------------|------|------|------|------|------|-------------|
|               |          | ( $\mu$ F) | (%)   | (V <sub>AC</sub> ) | (mm) | (mm) | (mm) | (mm) | (mm) | Compliance  |
| MEX102□480V75 | 102      | 0.0010     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX102□480V10 | 102      | 0.0010     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX102□480V15 | 102      | 0.0010     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX152□480V75 | 152      | 0.0015     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX152□480V10 | 152      | 0.0015     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX152□480V15 | 152      | 0.0015     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX222□480V75 | 222      | 0.0022     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX222□480V10 | 222      | 0.0022     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX222□480V15 | 222      | 0.0022     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX272□480V75 | 272      | 0.0027     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX272□480V10 | 272      | 0.0027     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX272□480V15 | 272      | 0.0027     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX332□480V75 | 332      | 0.0033     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX332□480V10 | 332      | 0.0033     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX332□480V15 | 332      | 0.0033     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX392□480V75 | 392      | 0.0039     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX392□480V10 | 392      | 0.0039     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX392□480V15 | 392      | 0.0039     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX472□480V75 | 472      | 0.0047     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX472□480V10 | 472      | 0.0047     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX472□480V15 | 472      | 0.0047     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX562□480V75 | 562      | 0.0056     | J,K,M | 480                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX562□480V10 | 562      | 0.0056     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX562□480V15 | 562      | 0.0056     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX682□480V75 | 682      | 0.0068     | J,K,M | 480                | 10.5 | 11.0 | 5.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX682□480V10 | 682      | 0.0068     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX682□480V15 | 682      | 0.0068     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX822□480V75 | 822      | 0.0082     | J,K,M | 480                | 10.5 | 11.0 | 5.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX822□480V10 | 822      | 0.0082     | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX822□480V15 | 822      | 0.0082     | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX103□480V75 | 103      | 0.010      | J,K,M | 480                | 10.5 | 11.0 | 5.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX103□480V10 | 103      | 0.010      | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX103□480V15 | 103      | 0.010      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX123□480V75 | 123      | 0.012      | J,K,M | 480                | 10.5 | 12.0 | 6.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX123□480V10 | 123      | 0.012      | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |

Note: 1. □: denotes tolerance code; 2. Contact Meritek for Part Number on options on lead: diameter, length, and/or forming.

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 480VAC

| Part Number    | Cap Code | Cap        | Tol   | Volt               | W    | H    | T    | P    | d    | Safety      |
|----------------|----------|------------|-------|--------------------|------|------|------|------|------|-------------|
|                |          | ( $\mu$ F) | (%)   | (V <sub>AC</sub> ) | (mm) | (mm) | (mm) | (mm) | (mm) | Compliance  |
| MEX123□480V15  | 123      | 0.012      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX153□480V75  | 153      | 0.015      | M     | 480                | 10.5 | 12.0 | 6.0  | 7.5  | 0.6  | UL,cUL,ENEC |
| MEX153□480V10  | 153      | 0.015      | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX153□480V15  | 153      | 0.015      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX183□480V10  | 183      | 0.018      | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX183□480V15  | 183      | 0.018      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX223□480V10  | 223      | 0.022      | J,K,M | 480                | 13.0 | 11.0 | 5.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX223□480V15  | 223      | 0.022      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX273□480V10  | 273      | 0.027      | J,K,M | 480                | 13.0 | 12.0 | 6.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX273□480V15  | 273      | 0.027      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX333□480V10  | 333      | 0.033      | J,K,M | 480                | 13.0 | 12.0 | 6.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX333□480V15  | 333      | 0.033      | J,K,M | 480                | 18.0 | 11.0 | 5.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX393□480V10  | 393      | 0.039      | J,K,M | 480                | 13.0 | 13.0 | 7.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX393□480V15  | 393      | 0.039      | J,K,M | 480                | 18.0 | 12.0 | 6.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX393□480V22  | 393      | 0.039      | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX473□480V10  | 473      | 0.047      | M     | 480                | 13.0 | 13.0 | 7.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX473□480V15  | 473      | 0.047      | J,K,M | 480                | 18.0 | 12.0 | 6.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX473□480V22  | 473      | 0.047      | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX563□480V10  | 563      | 0.056      | J,K,M | 480                | 13.0 | 14.0 | 8.0  | 10.0 | 0.6  | UL,cUL,ENEC |
| MEX563□480V15A | 563      | 0.056      | M     | 480                | 18.0 | 12.0 | 6.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX563□480V15B | 563      | 0.056      | J,K,M | 480                | 18.0 | 13.5 | 6.0  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX563□480V22  | 563      | 0.056      | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX683□480V15  | 683      | 0.068      | J,K,M | 480                | 17.0 | 15.5 | 7.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX683□480V22  | 683      | 0.068      | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX823□480V15  | 823      | 0.082      | J,K,M | 480                | 17.0 | 15.5 | 7.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX823□480V22  | 823      | 0.082      | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX104□480V15A | 104      | 0.10       | M     | 480                | 17.0 | 15.5 | 7.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX104□480V15B | 104      | 0.10       | J,K,M | 480                | 18.0 | 14.5 | 8.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX104□480V22  | 104      | 0.10       | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX124□480V15  | 124      | 0.12       | J,K,M | 480                | 17.0 | 16.5 | 9.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX124□480V22  | 124      | 0.12       | J,K,M | 480                | 25.0 | 14.5 | 6.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX154□480V15A | 154      | 0.15       | M     | 480                | 17.0 | 16.5 | 9.5  | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX154□480V15B | 154      | 0.15       | J,K,M | 480                | 17.0 | 19.0 | 11.0 | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX154□480V22  | 154      | 0.15       | J,K,M | 480                | 26.5 | 16.5 | 7.0  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX154□480V27  | 154      | 0.15       | J,K,M | 480                | 31.5 | 16.5 | 7.5  | 27.5 | 0.8  | UL,cUL,ENEC |

Note: 1. □: denotes tolerance code; 2. Contact Meritek for Part Number on options on lead: diameter, length, and/or forming.

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 480VAC

| Part Number    | Cap Code | Cap        | Tol   | Volt               | W    | H    | T    | P    | d    | Safety      |
|----------------|----------|------------|-------|--------------------|------|------|------|------|------|-------------|
|                |          | ( $\mu$ F) | (%)   | (V <sub>AC</sub> ) | (mm) | (mm) | (mm) | (mm) | (mm) | Compliance  |
| MEX184□480V15  | 184      | 0.18       | J,K,M | 480                | 17.0 | 19.0 | 11.0 | 15.0 | 0.6  | UL,cUL,ENEC |
| MEX184□480V22  | 184      | 0.18       | J,K,M | 480                | 26.5 | 17.5 | 8.5  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX184□480V27  | 184      | 0.18       | J,K,M | 480                | 31.5 | 16.5 | 7.5  | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX224□480V22  | 224      | 0.22       | J,K,M | 480                | 26.5 | 17.5 | 8.5  | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX224□480V27  | 224      | 0.22       | J,K,M | 480                | 32.0 | 18.0 | 9.0  | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX274□480V22  | 274      | 0.27       | J,K,M | 480                | 26.5 | 19.0 | 10.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX274□480V27  | 274      | 0.27       | J,K,M | 480                | 32.0 | 18.0 | 9.0  | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX304□480V37  | 304      | 0.30       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX334□480V37  | 334      | 0.33       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX334□480V22  | 334      | 0.33       | J,K,M | 480                | 26.0 | 20.0 | 11.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX334□480V27A | 334      | 0.33       | J,K,M | 480                | 31.5 | 20.0 | 11.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX334□480V27B | 334      | 0.33       | J,K,M | 480                | 32.0 | 12.0 | 18.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX334□480V32  | 334      | 0.33       | J,K,M | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX394□480V22  | 394      | 0.39       | J,K,M | 480                | 26.0 | 20.0 | 11.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX394□480V27  | 394      | 0.39       | J,K,M | 480                | 31.5 | 20.0 | 11.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX394□480V32  | 394      | 0.39       | J,K,M | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX394□480V37  | 394      | 0.39       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX404□480V37  | 404      | 0.40       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX474□480V22A | 474      | 0.47       | M     | 480                | 26.0 | 21.5 | 12.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX474□480V22B | 474      | 0.47       | J,K,M | 480                | 25.0 | 23.5 | 14.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX474□480V27A | 474      | 0.47       | M     | 480                | 31.5 | 20.0 | 11.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX474□480V27B | 474      | 0.47       | J,K,M | 480                | 32.0 | 22.0 | 12.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX474□480V32  | 474      | 0.47       | J,K,M | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX474□480V37  | 474      | 0.47       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX504□480V37  | 504      | 0.50       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX524□480V22  | 524      | 0.52       | J,K,M | 480                | 25.0 | 23.5 | 14.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX564□480V22A | 564      | 0.56       | M     | 480                | 25.0 | 23.5 | 14.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX564□480V22B | 564      | 0.56       | J,K,M | 480                | 26.0 | 25.0 | 15.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX564□480V27  | 564      | 0.56       | J,K,M | 480                | 31.5 | 22.5 | 13.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX564□480V32  | 564      | 0.56       | J,K,M | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX564□480V37  | 564      | 0.56       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX604□480V27  | 604      | 0.60       | J,K,M | 480                | 31.5 | 25.0 | 14.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX684□480V22  | 684      | 0.68       | M     | 480                | 26.0 | 25.0 | 15.0 | 22.5 | 0.8  | UL,cUL,ENEC |
| MEX684□480V27A | 684      | 0.68       | M     | 480                | 31.5 | 22.5 | 13.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX684□480V27B | 684      | 0.68       | J,K,M | 480                | 31.5 | 25.0 | 14.0 | 27.5 | 0.8  | UL,cUL,ENEC |

Note: 1. □: denotes tolerance code; 2. Contact Meritek for Part Number on options on lead: diameter, length, and/or forming.

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 480VAC

| Part Number    | Cap Code | Cap        | Tol   | Volt               | W    | H    | T    | P    | d    | Safety      |
|----------------|----------|------------|-------|--------------------|------|------|------|------|------|-------------|
|                |          | ( $\mu$ F) | (%)   | (V <sub>AC</sub> ) | (mm) | (mm) | (mm) | (mm) | (mm) | Compliance  |
| MEX684□480V27C | 684      | 0.68       | J,K,M | 480                | 32.0 | 16.0 | 22.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX684□480V32  | 684      | 0.68       | J,K,M | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX684□480V37  | 684      | 0.68       | J,K,M | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX804□480V32  | 804      | 0.8        | J,K,M | 480                | 37.0 | 26.5 | 16.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX824□480V27A | 824      | 0.82       | M     | 480                | 31.5 | 25.0 | 14.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX824□480V27B | 824      | 0.82       | J,K,M | 480                | 32.0 | 28.0 | 14.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX824□480V32  | 824      | 0.82       | M     | 480                | 37.0 | 24.0 | 13.5 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX824□480V37A | 824      | 0.82       | M     | 480                | 41.0 | 22.0 | 11.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX824□480V37B | 824      | 0.82       | J,K,M | 480                | 41.0 | 26.0 | 12.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX105□480V27A | 105      | 1.0        | M     | 480                | 32.0 | 16.0 | 27.5 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX105□480V27B | 105      | 1.0        | J,K,M | 480                | 32.0 | 18.5 | 31.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX105□480V27C | 105      | 1.0        | J,K,M | 480                | 32.0 | 28.0 | 18.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX105□480V32A | 105      | 1.0        | M     | 480                | 37.0 | 26.5 | 16.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX105□480V32B | 105      | 1.0        | J,K,M | 480                | 37.0 | 28.5 | 18.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX105□480V37A | 105      | 1.0        | J,K,M | 480                | 41.0 | 26.0 | 12.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX105□480V37B | 105      | 1.0        | J,K,M | 480                | 42.0 | 15.0 | 24.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX125□480V27A | 125      | 1.2        | M     | 480                | 32.0 | 28.0 | 18.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX125□480V27B | 125      | 1.2        | J,K,M | 480                | 32.0 | 29.0 | 19.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX125□480V32A | 125      | 1.2        | M     | 480                | 37.0 | 28.5 | 18.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX125□480V32B | 125      | 1.2        | J,K,M | 480                | 35.5 | 31.0 | 20.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX125□480V37A | 125      | 1.2        | J,K,M | 480                | 41.0 | 26.0 | 15.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX125□480V37B | 125      | 1.2        | J,K,M | 480                | 41.0 | 28.0 | 14.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX155□480V27A | 155      | 1.5        | M     | 480                | 32.0 | 29.0 | 19.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX155□480V27B | 155      | 1.5        | M     | 480                | 32.0 | 18.5 | 31.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX155□480V27C | 155      | 1.5        | J,K,M | 480                | 31.0 | 31.0 | 22.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX155□480V32A | 155      | 1.5        | M     | 480                | 35.5 | 31.0 | 20.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX155□480V32B | 155      | 1.5        | J,K,M | 480                | 37.0 | 34.0 | 22.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX155□480V37A | 155      | 1.5        | M     | 480                | 41.0 | 28.0 | 14.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX155□480V37B | 155      | 1.5        | M     | 480                | 41.0 | 26.0 | 15.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX155□480V37C | 155      | 1.5        | J,K,M | 480                | 41.0 | 30.0 | 16.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX155□480V37D | 155      | 1.5        | J,K,M | 480                | 42.0 | 19.0 | 24.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX185□480V27  | 185      | 1.8        | J,K,M | 480                | 32.0 | 37.0 | 22.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX185□480V32  | 185      | 1.8        | J,K,M | 480                | 37.0 | 34.0 | 22.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX185□480V37A | 185      | 1.8        | M     | 480                | 41.0 | 30.0 | 16.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX185□480V37B | 185      | 1.8        | J,K,M | 480                | 41.0 | 32.0 | 17.0 | 37.5 | 1.0  | UL,cUL,ENEC |

Note: 1. □: denotes tolerance code; 2. Contact Meritek for Part Number on options on lead: diameter, length, and/or forming.

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 480VAC

| Part Number    | Cap Code | Cap        | Tol   | Volt               | W    | H    | T    | P    | d    | Safety      |
|----------------|----------|------------|-------|--------------------|------|------|------|------|------|-------------|
|                |          | ( $\mu$ F) | (%)   | (V <sub>AC</sub> ) | (mm) | (mm) | (mm) | (mm) | (mm) | Compliance  |
| MEX225□480V27  | 225      | 2.2        | M     | 480                | 32.0 | 37.0 | 22.0 | 27.5 | 0.8  | UL,cUL,ENEC |
| MEX225□480V32  | 225      | 2.2        | M     | 480                | 37.0 | 34.0 | 22.0 | 32.5 | 0.8  | UL,cUL,ENEC |
| MEX225□480V37A | 225      | 2.2        | M     | 480                | 41.0 | 32.0 | 17.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX225□480V37B | 225      | 2.2        | J,K,M | 480                | 41.0 | 33.5 | 19.5 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX275□480V37  | 275      | 2.7        | J,K,M | 480                | 41.0 | 37.0 | 22.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX335□480V37A | 335      | 3.3        | M     | 480                | 41.0 | 37.0 | 22.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX335□480V37B | 335      | 3.3        | J,K,M | 480                | 41.5 | 41.0 | 27.5 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX395□480V37  | 395      | 3.9        | J,K,M | 480                | 41.0 | 43.0 | 28.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX445□480V37  | 445      | 4.4        | J,K,M | 480                | 41.0 | 43.0 | 28.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX445□480V47  | 445      | 4.4        | J,K,M | 480                | 51.0 | 43.5 | 29.0 | 47.5 | 1.0  | UL,cUL,ENEC |
| MEX445□480V52  | 445      | 4.4        | J,K,M | 480                | 57.0 | 38.0 | 24.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX475□480V37A | 475      | 4.7        | M     | 480                | 41.0 | 43.0 | 28.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX475□480V37B | 475      | 4.7        | J,K,M | 480                | 42.0 | 45.0 | 30.0 | 37.5 | 1.0  | UL,cUL,ENEC |
| MEX475□480V47  | 475      | 4.7        | J,K,M | 480                | 51.0 | 43.5 | 29.0 | 47.5 | 1.0  | UL,cUL,ENEC |
| MEX475□480V52  | 475      | 4.7        | J,K,M | 480                | 57.0 | 38.0 | 24.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX565□480V47  | 565      | 5.6        | M     | 480                | 51.0 | 43.5 | 29.0 | 47.5 | 1.0  | UL,cUL,ENEC |
| MEX565□480V52A | 565      | 5.6        | M     | 480                | 57.0 | 38.0 | 24.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX565□480V52B | 565      | 5.6        | J,K,M | 480                | 57.0 | 45.0 | 30.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX685□480V47  | 685      | 6.8        | J,K,M | 480                | 51.0 | 49.5 | 35.0 | 47.5 | 1.0  | UL,cUL,ENEC |
| MEX685□480V52A | 685      | 6.8        | J,K,M | 480                | 57.0 | 50.0 | 35.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX685□480V52B | 685      | 6.8        | M     | 480                | 57.0 | 45.0 | 30.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX685□480V52C | 685      | 6.8        | M     | 480                | 57.0 | 30.0 | 44.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX825□480V47  | 825      | 8.2        | M     | 480                | 51.0 | 49.5 | 35.0 | 47.5 | 1.0  | UL,cUL,ENEC |
| MEX825□480V52  | 825      | 8.2        | J,K,M | 480                | 57.0 | 50.0 | 35.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX106□480V52A | 106      | 10.0       | M     | 480                | 57.0 | 50.0 | 35.0 | 52.5 | 1.0  | UL,cUL,ENEC |
| MEX106□480V52B | 106      | 10.0       | J,K,M | 480                | 57.0 | 55.0 | 45.0 | 52.5 | 1.0  | UL,cUL,ENEC |

Note: 1. □: denotes tolerance code; 2. Contact Meritek for Part Number on options on lead: diameter, length, and/or forming.

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## RELIABILTY AND TEST CONDITIONS

| Item  | Test Condition  | Requirement   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
|---|---|---|-------|-------------|------|---|---------------------|-------|---|---------------------|-------|---|---------------------|-------|---|----------------------|-------|---|---------------------|
| Capacitance                                       | Measuring Frequency: $\pm 2\%$ ; Measuring Voltage: $\leq 1V_{rms}$ .   | Within the tolerance specified, at $+20\pm 5^{\circ}C$  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Withstand Voltage - Between Terminals             | Apply 4.3 times of rated voltage for 60s  | Within specified limits   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Withstand Voltage - Between Terminals & Enclosure | Apply 2 times of rated voltage $1.5KV_{AC}$ for 2~5s;<br>Min. $2KV_{AC}$  | Within specified limits   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Dissipation Factor                                | Measuring Frequency: $\pm 2\%$<br>Measuring Voltage: $\leq 1V_{rms}$ .  | D.F. : $\leq 0.001(0.1\%)$ at 1KHz  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Insulation resistance                             | Measured at 100V, $60\pm 5$ Sec   | $Cr \leq 0.33\mu F$ IR $\geq 15,000M\Omega$<br>$Cr > 0.33\mu F$ IR $\geq 5,000M\Omega \cdot \mu F/C$  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Solderability                                     | Soldering temperature: $+235\pm 5^{\circ}C$<br>Immersion duration: $2\pm 0.5$ sec   | More than 90% of circumferential surface of lead wire shall be covered with new solder  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Tensile Terminal Strength                         | Apply 1.0Kg (10N) for $10\pm 1$ sec to the terminal in the axial direction and acting in a direction away from the body.  | Shall be no abnormality   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Damp Heat   | Temperature: $+40^{\circ}C \pm 2^{\circ}C$ , Relative Humidity: 90%~95%<br>Time: 56days; After test, let rest for $1.5\pm 0.5$ hr at ordinary condition before making measurements.   | Appearance : No Visible Damage<br>Withstand Voltage: Within specified limits<br>$\Delta C/C$ : $\leq \pm 5\%$ of the value before test<br>DF: $\leq 0.002(0.2\%)$ Max at 1KHz<br>IR: $\geq 50\%$ of the rated value |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Dry Heat Resistance                               | Temperature: $110^{\circ}C \pm 2^{\circ}C$ , Times: 16 +1/-0Hrs   |   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Cold Resistance                                   | Temperature: $-40\pm 3^{\circ}C$ , Times: $2\pm 1$ Hrs  |   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Temperature Cycle                                 | Test Temperature Cycle: Total 5 cycles.<br>Each cycle includes<br><table border="1"> <thead> <tr> <th>Cycle</th> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><math>+20\pm 2^{\circ}C</math></td> <td>3 min</td> </tr> <tr> <td>2</td> <td><math>-40\pm 3^{\circ}C</math></td> <td>30min</td> </tr> <tr> <td>3</td> <td><math>+20\pm 2^{\circ}C</math></td> <td>3 min</td> </tr> <tr> <td>4</td> <td><math>+110\pm 2^{\circ}C</math></td> <td>30min</td> </tr> <tr> <td>5</td> <td><math>+20\pm 2^{\circ}C</math></td> <td>3 min</td> </tr> </tbody> </table> After test, let rest for $1.5\pm 0.5$ hr at ordinary condition before making measurements. |   | Cycle | Temperature | Time | 1 | $+20\pm 2^{\circ}C$ | 3 min | 2 | $-40\pm 3^{\circ}C$ | 30min | 3 | $+20\pm 2^{\circ}C$ | 3 min | 4 | $+110\pm 2^{\circ}C$ | 30min | 5 | $+20\pm 2^{\circ}C$ |
| Cycle   | Temperature   | Time  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| 1   | $+20\pm 2^{\circ}C$   | 3 min   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| 2   | $-40\pm 3^{\circ}C$   | 30min   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| 3   | $+20\pm 2^{\circ}C$   | 3 min   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| 4   | $+110\pm 2^{\circ}C$  | 30min   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| 5   | $+20\pm 2^{\circ}C$   | 3 min   |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Vibration Resistance                              | Frequency change: 10~55~10Hz<br>Vibration Distance: 1.5mm<br>Test Direction: X, Y, Z<br>Test Duration: 2+1/-0hrs each direction   | Appearance : No mechanical Damage<br>Connection: Shall be no short or open  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |
| Soldering Heat Resistance                         | Preheat Temperature: $100\sim 120^{\circ}C$<br>Preheat Duration: 60sec max<br>Temperature increase by $3^{\circ}C/sec$ max<br>Soldering Temperature: $+260\pm 5^{\circ}C$<br>Immersion Duration: $5\pm 1$ sec<br>Immersion Depth: $4\pm 0.8$ mm from roots<br>After test, allow it stay alone for $1.5\pm 0.5$ hrs at ordinary condition before making measurements   | Appearance: No Visible Damage<br>Withstand Voltage: Within specified limits<br>$\Delta C/C$ : $\leq \pm 3\%$ of the value before test<br>DF: $\leq 0.002(0.2\%)$ Max at 1KHz<br>IR: $\geq 50\%$ of the rated value  |       |             |      |   |                     |       |   |                     |       |   |                     |       |   |                      |       |   |                     |

# EMI Suppression Capacitors X2 Class 480VAC

MEX 480V Series

**MERITEK**

## RELIABILTY AND TEST CONDITIONS

| Item                       | Test Condition   | Requirement   |
|----------------------------|--|---|
| <b>Endurance</b>           | Duration: 1,000 hours, Temperature: $+110\pm 2^{\circ}\text{C}$<br>Voltage: 1.25 times rated voltage.<br>Once every hour the voltage increased to 1KVrms. For 0.1sec. The test voltage is applied to each capacitor individually through a Resistor of $47\Omega\pm 5\%$ . | Appearance : No Visible Damage<br>$\Delta C/C: \leq \pm 10\%$ of the value before test<br>DF: $\leq 0.008$ Max at 1KHz; for $C_r \leq 1\mu\text{F}$<br>DF: $\leq 0.005$ Max at 1KHz; for $C_r > 1\mu\text{F}$<br>IR: $\geq 50\%$ of the rated value |
| <b>Humidity Resistance</b> | Test Temperature: $-40\pm 2^{\circ}\text{C}$<br>Test Humidity: 87% to 93% R.H.<br>Test Voltage: rated voltage<br>Test Duration: 500 hours<br>After test, allow it stay alone for $1.5\pm 0.5$ hrs at ordinary condition before making measurements                         | Appearance: No Visible Damage<br>Withstand Voltage: Within specified limits<br>$\Delta C/C: \leq \pm 5\%$ of the value before test<br>DF: $\leq 0.002$ (0.2%) Max at 1KHz<br>IR: $\geq 50\%$ of the rated value                                     |

### Notes:

1. Ambient Temp:  $15^{\circ}\text{C}$  to  $35^{\circ}\text{C}$ , Relative Humidity (R.H.): 45% to 75%, Air Pressure: 86kpa to 106kpa
2. Operating Temperature:  $-40\sim 110^{\circ}\text{C}$
3. Storage needs to be kept indoors at  $-10\sim +40^{\circ}\text{C}$  and relative humidity of under 75% without any sudden temperature changes, direct sunlight and corrosive gas around
4. Do not apply and exceeding vibration, shock (dropping) and pressure

\*Specifications subject to change without notice.