

# EMI Suppression Capacitors X2 Class 440VAC

MEX 440V 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    440V    XXXX  
(1)    (2)    (3)    (4)    (5)



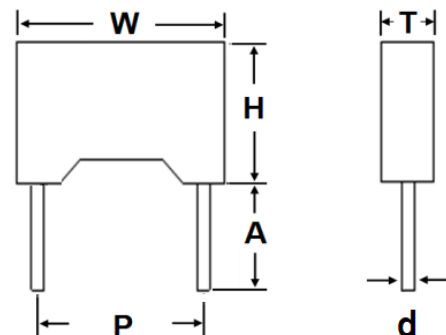
No	Item	Digit	Description	Reference
(1)	Meritek Series	MEX	EMI Suppression Capacitors	X2 Safety Cap
(2)	Capacitance	223	223: 22000pF	First two digits: Significant, Third: Multiplier
(3)	Tolerance	K	K: ±10%	-10%~+10%
(4)	Rated Voltage	440V	440V: 440VAC	330V:330VAC, 440V:440VAC, 480V: 480VAC
(5)	Internal 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	440VAC at 50~60Hz,	40/110/56/B
Capacitance, Tolerance	0.001μF ~ 10.0μF	±5% (J), ±10% (K), ±20% (M)
Dissipation Factor (tan δ)	≤0.1%	at 1KHz ±2%, ≤1.0V <sub>RMS</sub>
Insulation resistance at 100V <sub>DC</sub> , Change Time: 60s ±5s	≥ 15,000MΩ (C≤0.33μF)	≥ 5,000MΩ*μF/C (C>0.33μF)
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

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## ELECTRICAL SPECIFICATION – 440VAC

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□440V75	102	0.0010	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX102□440V10	102	0.0010	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX102□440V15	102	0.0010	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX152□440V75	152	0.0015	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX152□440V10	152	0.0015	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX152□440V15	152	0.0015	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX222□440V75	222	0.0022	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX222□440V10	222	0.0022	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX222□440V15	222	0.0022	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX272□440V75	272	0.0027	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX272□440V10	272	0.0027	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX272□440V15	272	0.0027	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX332□440V75	332	0.0033	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX332□440V10	332	0.0033	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX332□440V15	332	0.0033	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX392□440V75	392	0.0039	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX392□440V10	392	0.0039	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX392□440V15	392	0.0039	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX472□440V75	472	0.0047	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX472□440V10	472	0.0047	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX472□440V15	472	0.0047	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX562□440V75	562	0.0056	J,K,M	440	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
MEX562□440V10	562	0.0056	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX562□440V15	562	0.0056	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX682□440V75	682	0.0068	J,K,M	440	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
MEX682□440V10	682	0.0068	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX682□440V15	682	0.0068	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX822□440V75	822	0.0082	J,K,M	440	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
MEX822□440V10	822	0.0082	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX822□440V15	822	0.0082	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX103□440V75	103	0.010	J,K,M	440	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
MEX103□440V10	103	0.010	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX103□440V15	103	0.010	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX123□440V75	123	0.012	J,K,M	440	10.5	12.0	6.0	7.5	0.6	UL,cUL,ENEC
MEX123□440V10	123	0.012	J,K,M	440	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 440VAC

MEX 440V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 440VAC

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□440V15	123	0.012	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX153□440V75	153	0.015	M	440	10.5	12.0	6.0	7.5	0.6	UL,cUL,ENEC
MEX153□440V10	153	0.015	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX153□440V15	153	0.015	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX183□440V10	183	0.018	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX183□440V15	183	0.018	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX223□440V10	223	0.022	J,K,M	440	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
MEX223□440V15	223	0.022	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX273□440V10	273	0.027	J,K,M	440	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
MEX273□440V15	273	0.027	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX333□440V10	333	0.033	J,K,M	440	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
MEX333□440V15	333	0.033	J,K,M	440	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
MEX393□440V10	393	0.039	J,K,M	440	13.0	13.0	7.0	10.0	0.6	UL,cUL,ENEC
MEX393□440V15	393	0.039	J,K,M	440	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
MEX393□440V22	393	0.039	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX473□440V10	473	0.047	M	440	13.0	13.0	7.0	10.0	0.6	UL,cUL,ENEC
MEX473□440V15	473	0.047	J,K,M	440	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
MEX473□440V22	473	0.047	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX563□440V10	563	0.056	J,K,M	440	13.0	14.0	8.0	10.0	0.6	UL,cUL,ENEC
MEX563□440V15A	563	0.056	M	440	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
MEX563□440V15B	563	0.056	J,K,M	440	18.0	13.5	6.0	15.0	0.6	UL,cUL,ENEC
MEX563□440V22	563	0.056	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX683□440V15	683	0.068	J,K,M	440	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
MEX683□440V22	683	0.068	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX823□440V15	823	0.082	J,K,M	440	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
MEX823□440V22	823	0.082	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX104□440V15A	104	0.10	M	440	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
MEX104□440V15B	104	0.10	J,K,M	440	18.0	14.5	8.5	15.0	0.6	UL,cUL,ENEC
MEX104□440V22	104	0.10	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX124□440V15	124	0.12	J,K,M	440	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
MEX124□440V22	124	0.12	J,K,M	440	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
MEX154□440V15A	154	0.15	M	440	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
MEX154□440V15B	154	0.15	J,K,M	440	17.0	19.0	11.0	15.0	0.6	UL,cUL,ENEC
MEX154□440V22	154	0.15	J,K,M	440	26.5	16.5	7.0	22.5	0.8	UL,cUL,ENEC
MEX154□440V27	154	0.15	J,K,M	440	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 440VAC

MEX 440V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 440VAC

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□440V15	184	0.18	J,K,M	440	17.0	19.0	11.0	15.0	0.6	UL,cUL,ENEC
MEX184□440V22	184	0.18	J,K,M	440	26.5	17.5	8.5	22.5	0.8	UL,cUL,ENEC
MEX184□440V27	184	0.18	J,K,M	440	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC
MEX224□440V22	224	0.22	J,K,M	440	26.5	17.5	8.5	22.5	0.8	UL,cUL,ENEC
MEX224□440V27	224	0.22	J,K,M	440	32.0	18.0	9.0	27.5	0.8	UL,cUL,ENEC
MEX274□440V22	274	0.27	J,K,M	440	26.5	19.0	10.0	22.5	0.8	UL,cUL,ENEC
MEX274□440V27	274	0.27	J,K,M	440	32.0	18.0	9.0	27.5	0.8	UL,cUL,ENEC
MEX304□440V37	304	0.30	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX334□440V37	334	0.33	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX334□440V22	334	0.33	J,K,M	440	26.0	20.0	11.0	22.5	0.8	UL,cUL,ENEC
MEX334□440V27A	334	0.33	J,K,M	440	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
MEX334□440V27B	334	0.33	J,K,M	440	32.0	12.0	18.0	27.5	0.8	UL,cUL,ENEC
MEX334□440V32	334	0.33	J,K,M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX394□440V22	394	0.39	J,K,M	440	26.0	20.0	11.0	22.5	0.8	UL,cUL,ENEC
MEX394□440V27	394	0.39	J,K,M	440	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
MEX394□440V32	394	0.39	J,K,M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX394□440V37	394	0.39	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX404□440V37	404	0.40	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX474□440V22A	474	0.47	M	440	26.0	21.5	12.0	22.5	0.8	UL,cUL,ENEC
MEX474□440V22B	474	0.47	J,K,M	440	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
MEX474□440V27A	474	0.47	M	440	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
MEX474□440V27B	474	0.47	J,K,M	440	32.0	22.0	12.0	27.5	0.8	UL,cUL,ENEC
MEX474□440V32	474	0.47	J,K,M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX474□440V37	474	0.47	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX504□440V37	504	0.50	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX524□440V22	524	0.52	J,K,M	440	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
MEX564□440V22A	564	0.56	M	440	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
MEX564□440V22B	564	0.56	J,K,M	440	26.0	25.0	15.0	22.5	0.8	UL,cUL,ENEC
MEX564□440V27	564	0.56	J,K,M	440	31.5	22.5	13.0	27.5	0.8	UL,cUL,ENEC
MEX564□440V32	564	0.56	J,K,M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX564□440V37	564	0.56	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX604□440V27	604	0.60	J,K,M	440	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
MEX684□440V22	684	0.68	M	440	26.0	25.0	15.0	22.5	0.8	UL,cUL,ENEC
MEX684□440V27A	684	0.68	M	440	31.5	22.5	13.0	27.5	0.8	UL,cUL,ENEC
MEX684□440V27B	684	0.68	J,K,M	440	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 440VAC

MEX 440V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 440VAC

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□440V27C	684	0.68	J,K,M	440	32.0	16.0	22.0	27.5	0.8	UL,cUL,ENEC
MEX684□440V32	684	0.68	J,K,M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX684□440V37	684	0.68	J,K,M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX804□440V32	804	0.80	J,K,M	440	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
MEX824□440V27A	824	0.82	M	440	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
MEX824□440V27B	824	0.82	J,K,M	440	32.0	28.0	14.0	27.5	0.8	UL,cUL,ENEC
MEX824□440V32	824	0.82	M	440	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
MEX824□440V37A	824	0.82	M	440	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
MEX824□440V37B	824	0.82	J,K,M	440	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
MEX105□440V27A	105	1.0	M	440	32.0	16.0	27.5	27.5	0.8	UL,cUL,ENEC
MEX105□440V27B	105	1.0	J,K,M	440	32.0	18.5	31.0	27.5	0.8	UL,cUL,ENEC
MEX105□440V27C	105	1.0	J,K,M	440	32.0	28.0	18.0	27.5	0.8	UL,cUL,ENEC
MEX105□440V32A	105	1.0	M	440	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
MEX105□440V32B	105	1.0	J,K,M	440	37.0	28.5	18.0	32.5	0.8	UL,cUL,ENEC
MEX105□440V37A	105	1.0	J,K,M	440	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
MEX105□440V37B	105	1.0	J,K,M	440	42.0	15.0	24.0	37.5	1.0	UL,cUL,ENEC
MEX125□440V27A	125	1.2	M	440	32.0	28.0	18.0	27.5	0.8	UL,cUL,ENEC
MEX125□440V27B	125	1.2	J,K,M	440	32.0	29.0	19.0	27.5	0.8	UL,cUL,ENEC
MEX125□440V32A	125	1.2	M	440	37.0	28.5	18.0	32.5	0.8	UL,cUL,ENEC
MEX125□440V32B	125	1.2	J,K,M	440	35.5	31.0	20.0	32.5	0.8	UL,cUL,ENEC
MEX125□440V37A	125	1.2	J,K,M	440	41.0	26.0	15.0	37.5	1.0	UL,cUL,ENEC
MEX125□440V37B	125	1.2	J,K,M	440	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
MEX155□440V27A	155	1.5	M	440	32.0	29.0	19.0	27.5	0.8	UL,cUL,ENEC
MEX155□440V27B	155	1.5	M	440	32.0	18.5	31.0	27.5	0.8	UL,cUL,ENEC
MEX155□440V27C	155	1.5	J,K,M	440	31.0	31.0	22.0	27.5	0.8	UL,cUL,ENEC
MEX155□440V32A	155	1.5	M	440	35.5	31.0	20.0	32.5	0.8	UL,cUL,ENEC
MEX155□440V32B	155	1.5	J,K,M	440	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
MEX155□440V37A	155	1.5	M	440	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
MEX155□440V37B	155	1.5	M	440	41.0	26.0	15.0	37.5	1.0	UL,cUL,ENEC
MEX155□440V37C	155	1.5	J,K,M	440	41.0	30.0	16.0	37.5	1.0	UL,cUL,ENEC
MEX155□440V37D	155	1.5	J,K,M	440	42.0	19.0	24.0	37.5	1.0	UL,cUL,ENEC
MEX185□440V27	185	1.8	J,K,M	440	32.0	37.0	22.0	27.5	0.8	UL,cUL,ENEC
MEX185□440V32	185	1.8	J,K,M	440	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
MEX185□440V37A	185	1.8	M	440	41.0	30.0	16.0	37.5	1.0	UL,cUL,ENEC
MEX185□440V37B	185	1.8	J,K,M	440	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 440VAC

MEX 440V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 440VAC

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□440V27	225	2.2	M	440	32.0	37.0	22.0	27.5	0.8	UL,cUL,ENEC
MEX225□440V32	225	2.2	M	440	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
MEX225□440V37A	225	2.2	M	440	41.0	32.0	17.0	37.5	1.0	UL,cUL,ENEC
MEX225□440V37B	225	2.2	J,K,M	440	41.0	33.5	19.5	37.5	1.0	UL,cUL,ENEC
MEX275□440V37	275	2.7	J,K,M	440	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
MEX335□440V37A	335	3.3	M	440	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
MEX335□440V37B	335	3.3	J,K,M	440	41.5	41.0	27.5	37.5	1.0	UL,cUL,ENEC
MEX395□440V37	395	3.9	J,K,M	440	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
MEX445□440V37	445	4.4	J,K,M	440	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
MEX445□440V47	445	4.4	J,K,M	440	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
MEX445□440V52	445	4.4	J,K,M	440	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
MEX475□440V37A	475	4.7	M	440	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
MEX475□440V37B	475	4.7	J,K,M	440	42.0	45.0	30.0	37.5	1.0	UL,cUL,ENEC
MEX475□440V47	475	4.7	J,K,M	440	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
MEX475□440V52	475	4.7	J,K,M	440	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
MEX565□440V47	565	5.6	M	440	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
MEX565□440V52A	565	5.6	M	440	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
MEX565□440V52B	565	5.6	J,K,M	440	57.0	45.0	30.0	52.5	1.0	UL,cUL,ENEC
MEX685□440V47	685	6.8	J,K,M	440	51.0	49.5	35.0	47.5	1.0	UL,cUL,ENEC
MEX685□440V52A	685	6.8	J,K,M	440	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
MEX685□440V52B	685	6.8	M	440	57.0	45.0	30.0	52.5	1.0	UL,cUL,ENEC
MEX685□440V52C	685	6.8	M	440	57.0	30.0	44.0	52.5	1.0	UL,cUL,ENEC
MEX825□440V47	825	8.2	M	440	51.0	49.5	35.0	47.5	1.0	UL,cUL,ENEC
MEX825□440V52	825	8.2	J,K,M	440	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
MEX106□440V52A	106	10.0	M	440	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
MEX106□440V52B	106	10.0	J,K,M	440	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 440VAC

MEX 440V 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; Min. $2KV_{AC}$	Within specified limits																	
Dissipation Factor	Measuring Frequency: $\pm 2\%$ 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 $\geq 15,000M\Omega$ $Cr > 0.33\mu F$ IR $\geq 5,000M\Omega \cdot \mu F/C$																	
Solderability	Soldering temperature: $+235\pm 5^{\circ}C$ 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% Time: 56days; After test, let rest for $1.5\pm 0.5$ hr at ordinary condition before making measurements.	Appearance : No Visible Damage Withstand Voltage: Within specified limits $\Delta C/C$ : $\leq \pm 5\%$ of the value before test DF: $\leq 0.002(0.2\%)$ Max at 1KHz IR: $\geq 50\%$ of the rated value																	
Dry Heat Resistance	Temperature: $110^{\circ}C \pm 2^{\circ}C$ , Times: 16 $+1/-0$ Hrs																		
Cold Resistance	Temperature: $-40\pm 3^{\circ}C$ , Times: $2\pm 1$ Hrs																		
Temperature Cycle	Test Temperature Cycle: Total 5 cycles. Each cycle includes <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 Vibration Distance: 1.5mm Test Direction: X, Y, Z Test Duration: 2 $+1/-0$ hrs each direction	Appearance : No mechanical Damage Connection: Shall be no short or open																	
Soldering Heat Resistance	Preheat Temperature: $100\sim 120^{\circ}C$ Preheat Duration: 60sec max Temperature increase by $3^{\circ}C/sec$ max Soldering Temperature: $+260\pm 5^{\circ}C$ Immersion Duration: $5\pm 1$ sec Immersion Depth: $4\pm 0.8$ mm from roots After test, allow it stay alone for $1.5\pm 0.5$ hrs at ordinary condition before making measurements	Appearance: No Visible Damage Withstand Voltage: Within specified limits $\Delta C/C$ : $\leq \pm 3\%$ of the value before test DF: $\leq 0.002(0.2\%)$ Max at 1KHz IR: $\geq 50\%$ of the rated value																	

# EMI Suppression Capacitors X2 Class 440VAC

MEX 440V Series

**MERITEK**

## RELIABILTY AND TEST CONDITIONS

Item	Test Condition	Requirement
<b>Endurance</b>	Duration: 1,000 hours, Temperature: +110± 2°C Voltage: 1.25 times rated voltage. Once every hour the voltage increased to 1KVrms. For 0.1sec. The test voltage is applied to each capacitor individually through a Resistor of 47Ω±5%.	Appearance : No Visible Damage ΔC/C: ≤ ±10% of the value before test DF: ≤ 0.008 Max at 1KHz; for Cr≤1μF DF: ≤ 0.005 Max at 1KHz; for Cr>1μF IR: ≥ 50% of the rated value
<b>Humidity Resistance</b>	Test Temperature: -40±2°C Test Humidity: 87% to 93% R.H. Test Voltage: rated voltage Test Duration: 500 hours After test, allow it stay alone for 1.5±0.5hrs at ordinary condition before making measurements	Appearance: No Visible Damage Withstand Voltage: Within specified limits ΔC/C: ≤ ±5% of the value before test DF: ≤ 0.002 (0.2%) Max at 1KHz IR: ≥ 50% of the rated value

Notes:

1. Ambient Temp: 15°C to 35°C, Relative Humidity (R.H.): 45% to 75%, Air Pressure: 86kpa to 106kpa
2. Operating Temperature: -40~110°C
3. Storage needs to be kept indoors at -10~+40°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.