

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D 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

ME1X 223 K 1K5D xxx
(1) (2) (3) (4) (5)



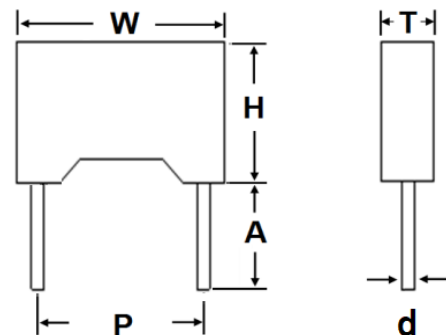
No	Item	Digit	Description	Reference
(1)	Meritek Series	ME1X	EMI Suppression Capacitors	X1 Class Safety Film Capacitor
(2)	Capacitance	223	223: 22000pF	First two digits: Significant, Third: Multiplier
(3)	Tolerance	K	K: $\pm 10\%$	$\pm 5\%$ (J), $\pm 20\%$ (M)
(4)	Rated Voltage	1K5D	1K5D: 1500VDC	1K0D: 1000VDC, 1K3D: 1350VDC
(5)	Internal Code	xxx	Pitch or Internal control code	Internal Control or project reference

SPECIFICATIONS

Item	Characteristic	
Operating Temperature Range	-40°C ~ +110°C	
Rated Voltage , Climate Category	1500VDC	40/110/56/B
Capacitance, Tolerance	0.001 μ F ~ 10.0 μ F	$\pm 5\%$ (J), $\pm 10\%$ (K), $\pm 20\%$ (M)
Dissipation Factor (tan δ)	$\leq 0.1\%$	at 1KHz $\pm 2\%$, $\leq 1.0V_{RMS}$
Insulation resistance at 100V _{DC} , 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	Between Terminals	Between Terminals and Case
	4.3*U _{rDC} for 60s	2*U _r +1.5KV _{AC} for 2~5s, Min 2KV _{AC}

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	
52.5	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 X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

ELECTRICAL SPECIFICATION – 1500VDC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V _{DC})	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X102□1K5D75	102	0.0010	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X102□1K5D10	102	0.0010	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X102□1K5D15	102	0.0010	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X152□1K5D75	152	0.0015	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X152□1K5D10	152	0.0015	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X152□1K5D15	152	0.0015	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X222□1K5D75	222	0.0022	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X222□1K5D10	222	0.0022	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X222□1K5D15	222	0.0022	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X272□1K5D75	272	0.0027	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X272□1K5D10	272	0.0027	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X272□1K5D15	272	0.0027	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X332□1K5D75	332	0.0033	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X332□1K5D10	332	0.0033	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X332□1K5D15	332	0.0033	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X392□1K5D75	392	0.0039	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X392□1K5D10	392	0.0039	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X392□1K5D15	392	0.0039	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X472□1K5D75	472	0.0047	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X472□1K5D10	472	0.0047	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X472□1K5D15	472	0.0047	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X562□1K5D75	562	0.0056	J,K,M	1500	10.5	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X562□1K5D10	562	0.0056	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X562□1K5D15	562	0.0056	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X682□1K5D75	682	0.0068	J,K,M	1500	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X682□1K5D10	682	0.0068	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X682□1K5D15	682	0.0068	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X882□1K5D75	882	0.0082	J,K,M	1500	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X882□1K5D10	882	0.0082	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X882□1K5D15	882	0.0082	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X103□1K5D75	103	0.010	J,K,M	1500	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X103□1K5D10	103	0.010	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X103□1K5D15	103	0.010	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X123□1K5D75	123	0.012	J,K,M	1500	10.5	12.0	6.0	7.5	0.6	UL,cUL,ENEC
ME1X123□1K5D10	123	0.012	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC

Note: 1. □: denotes tolerance code; 2. *: Contact Meritek for Part Number

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

ELECTRICAL SPECIFICATION – 1500VDC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V _{DC})	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X123□1K5D15	123	0.012	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X153□1K5D75	153	0.015	M	1500	10.5	12.0	6.0	7.5	0.6	UL,cUL,ENEC
ME1X153□1K5D10	153	0.015	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X153□1K5D15	153	0.015	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X183□1K5D10	183	0.018	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X183□1K5D15	183	0.018	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X223□1K5D10	223	0.022	J,K,M	1500	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X223□1K5D15	223	0.022	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X273□1K5D10	273	0.027	J,K,M	1500	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
ME1X273□1K5D15	273	0.027	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X333□1K5D10	333	0.033	J,K,M	1500	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
ME1X333□1K5D15	333	0.033	J,K,M	1500	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X393□1K5D10	393	0.039	J,K,M	1500	13.0	13.0	7.0	10.0	0.6	UL,cUL,ENEC
ME1X393□1K5D15	393	0.039	J,K,M	1500	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
ME1X393□1K5D22	393	0.039	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X473□1K5D10	473	0.047	M	1500	13.0	13.0	7.0	10.0	0.6	UL,cUL,ENEC
ME1X473□1K5D15	473	0.047	J,K,M	1500	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
ME1X473□1K5D22	473	0.047	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X563□1K5D10	563	0.056	J,K,M	1500	13.0	14.0	8.0	10.0	0.6	UL,cUL,ENEC
ME1X563□1K5D15A	563	0.056	M	1500	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
ME1X563□1K5D15B	563	0.056	J,K,M	1500	18.0	13.5	6.0	15.0	0.6	UL,cUL,ENEC
ME1X563□1K5D22	563	0.056	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X683□1K5D15	683	0.068	J,K,M	1500	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
ME1X683□1K5D22	683	0.068	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X823□1K5D15	823	0.082	J,K,M	1500	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
ME1X823□1K5D22	823	0.082	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X104□1K5D15A	104	0.10	M	1500	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
ME1X104□1K5D15B	104	0.10	J,K,M	1500	18.0	14.5	8.5	15.0	0.6	UL,cUL,ENEC
ME1X104□1K5D22	104	0.10	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X124□1K5D15	124	0.12	J,K,M	1500	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
ME1X124□1K5D22	124	0.12	J,K,M	1500	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X154□1K5D15A	154	0.15	M	1500	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
ME1X154□1K5D15B	154	0.15	J,K,M	1500	17.0	19.0	11.0	15.0	0.6	UL,cUL,ENEC
ME1X154□1K5D22	154	0.15	J,K,M	1500	26.5	16.5	7.0	22.5	0.8	UL,cUL,ENEC
ME1X154□1K5D27	154	0.15	J,K,M	1500	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC

Note: 1. □: denotes tolerance code; 2. *: Contact Meritek for Part Number

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

ELECTRICAL SPECIFICATION – 1500VDC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V _{DC})	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X184□1K5D15	184	0.18	J,K,M	1500	17.0	19.0	11.0	15.0	0.6	UL,cUL,ENEC
ME1X184□1K5D22	184	0.18	J,K,M	1500	26.5	17.5	8.5	22.5	0.8	UL,cUL,ENEC
ME1X184□1K5D27	184	0.18	J,K,M	1500	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC
ME1X224□1K5D22	224	0.22	J,K,M	1500	26.5	17.5	8.5	22.5	0.8	UL,cUL,ENEC
ME1X224□1K5D27	224	0.22	J,K,M	1500	32.0	18.0	9.0	27.5	0.8	UL,cUL,ENEC
ME1X274□1K5D22	274	0.27	J,K,M	1500	26.5	19.0	10.0	22.5	0.8	UL,cUL,ENEC
ME1X274□1K5D27	274	0.27	J,K,M	1500	32.0	18.0	9.0	27.5	0.8	UL,cUL,ENEC
ME1X304□1K5D37	304	0.30	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X334□1K5D37	334	0.33	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X334□1K5D22	334	0.33	J,K,M	1500	26.0	20.0	11.0	22.5	0.8	UL,cUL,ENEC
ME1X334□1K5D27A	334	0.33	J,K,M	1500	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X334□1K5D27B	334	0.33	J,K,M	1500	32.0	12.0	18.0	27.5	0.8	UL,cUL,ENEC
ME1X334□1K5D32	334	0.33	J,K,M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X394□1K5D22	394	0.39	J,K,M	1500	26.0	20.0	11.0	22.5	0.8	UL,cUL,ENEC
ME1X394□1K5D27	394	0.39	J,K,M	1500	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X394□1K5D32	394	0.39	J,K,M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X394□1K5D37	394	0.39	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X404□1K5D37	404	0.40	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X474□1K5D22A	474	0.47	M	1500	26.0	21.5	12.0	22.5	0.8	UL,cUL,ENEC
ME1X474□1K5D22B	474	0.47	J,K,M	1500	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
ME1X474□1K5D27A	474	0.47	M	1500	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X474□1K5D27B	474	0.47	J,K,M	1500	32.0	22.0	12.0	27.5	0.8	UL,cUL,ENEC
ME1X474□1K5D32	474	0.47	J,K,M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X474□1K5D37	474	0.47	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X504□1K5D37	504	0.50	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X524□1K5D22	524	0.52	J,K,M	1500	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
ME1X564□1K5D22A	564	0.56	M	1500	25.0	23.5	14.0	22.5	0.8	UL,cUL,ENEC
ME1X564□1K5D22B	564	0.56	J,K,M	1500	26.0	25.0	15.0	22.5	0.8	UL,cUL,ENEC
ME1X564□1K5D27	564	0.56	J,K,M	1500	31.5	22.5	13.0	27.5	0.8	UL,cUL,ENEC
ME1X564□1K5D32	564	0.56	J,K,M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X564□1K5D37	564	0.56	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X604□1K5D27	604	0.60	J,K,M	1500	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
ME1X684□1K5D22	684	0.68	M	1500	26.0	25.0	15.0	22.5	0.8	UL,cUL,ENEC
ME1X684□1K5D27A	684	0.68	M	1500	31.5	22.5	13.0	27.5	0.8	UL,cUL,ENEC
ME1X684□1K5D27B	684	0.68	J,K,M	1500	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC

Note: 1. □: denotes tolerance code; 2. *: Contact Meritek for Part Number

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

ELECTRICAL SPECIFICATION – 1500VDC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V _{DC})	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X684□1K5D27C	684	0.68	J,K,M	1500	32.0	16.0	22.0	27.5	0.8	UL,cUL,ENEC
ME1X684□1K5D32	684	0.68	J,K,M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X684□1K5D37	684	0.68	J,K,M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X804□1K5D32	804	0.80	J,K,M	1500	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
ME1X824□1K5D27A	824	0.82	M	1500	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
ME1X824□1K5D27B	824	0.82	J,K,M	1500	32.0	28.0	14.0	27.5	0.8	UL,cUL,ENEC
ME1X824□1K5D32	824	0.82	M	1500	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X824□1K5D37A	824	0.82	M	1500	41.0	22.0	11.0	37.5	1.0	UL,cUL,ENEC
ME1X824□1K5D37B	824	0.82	J,K,M	1500	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
ME1X105□1K5D27A	105	1.0	M	1500	32.0	16.0	27.5	27.5	0.8	UL,cUL,ENEC
ME1X105□1K5D27B	105	1.0	J,K,M	1500	32.0	18.5	31.0	27.5	0.8	UL,cUL,ENEC
ME1X105□1K5D27C	105	1.0	J,K,M	1500	32.0	28.0	18.0	27.5	0.8	UL,cUL,ENEC
ME1X105□1K5D32A	105	1.0	M	1500	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
ME1X105□1K5D32B	105	1.0	J,K,M	1500	37.0	28.5	18.0	32.5	0.8	UL,cUL,ENEC
ME1X105□1K5D37A	105	1.0	J,K,M	1500	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
ME1X105□1K5D37B	105	1.0	J,K,M	1500	42.0	15.0	24.0	37.5	1.0	UL,cUL,ENEC
ME1X125□1K5D27A	125	1.2	M	1500	32.0	28.0	18.0	27.5	0.8	UL,cUL,ENEC
ME1X125□1K5D27B	125	1.2	J,K,M	1500	32.0	29.0	19.0	27.5	0.8	UL,cUL,ENEC
ME1X125□1K5D32A	125	1.2	M	1500	37.0	28.5	18.0	32.5	0.8	UL,cUL,ENEC
ME1X125□1K5D32B	125	1.2	J,K,M	1500	35.5	31.0	20.0	32.5	0.8	UL,cUL,ENEC
ME1X125□1K5D37A	125	1.2	J,K,M	1500	41.0	26.0	15.0	37.5	1.0	UL,cUL,ENEC
ME1X125□1K5D37B	125	1.2	J,K,M	1500	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
ME1X155□1K5D27A	155	1.5	M	1500	32.0	29.0	19.0	27.5	0.8	UL,cUL,ENEC
ME1X155□1K5D27B	155	1.5	M	1500	32.0	18.5	31.0	27.5	0.8	UL,cUL,ENEC
ME1X155□1K5D27C	155	1.5	J,K,M	1500	31.0	31.0	22.0	27.5	0.8	UL,cUL,ENEC
ME1X155□1K5D32A	155	1.5	M	1500	35.5	31.0	20.0	32.5	0.8	UL,cUL,ENEC
ME1X155□1K5D32B	155	1.5	J,K,M	1500	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
ME1X155□1K5D37A	155	1.5	M	1500	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
ME1X155□1K5D37B	155	1.5	M	1500	41.0	26.0	15.0	37.5	1.0	UL,cUL,ENEC
ME1X155□1K5D37C	155	1.5	J,K,M	1500	41.0	30.0	16.0	37.5	1.0	UL,cUL,ENEC
ME1X155□1K5D37D	155	1.5	J,K,M	1500	42.0	19.0	24.0	37.5	1.0	UL,cUL,ENEC
ME1X185□1K5D27	185	1.8	J,K,M	1500	32.0	37.0	22.0	27.5	0.8	UL,cUL,ENEC
ME1X185□1K5D32	185	1.8	J,K,M	1500	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
ME1X185□1K5D37A	185	1.8	M	1500	41.0	30.0	16.0	37.5	1.0	UL,cUL,ENEC
ME1X185□1K5D37B	185	1.8	J,K,M	1500	41.0	32.0	17.0	37.5	1.0	UL,cUL,ENEC

Note: 1. □: denotes tolerance code; 2. *: Contact Meritek for Part Number

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

ELECTRICAL SPECIFICATION – 1500VDC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V _{DC})	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X225□1K5D27	225	2.2	M	1500	32.0	37.0	22.0	27.5	0.8	UL,cUL,ENEC
ME1X225□1K5D32	225	2.2	M	1500	37.0	34.0	22.0	32.5	0.8	UL,cUL,ENEC
ME1X225□1K5D37A	225	2.2	M	1500	41.0	32.0	17.0	37.5	1.0	UL,cUL,ENEC
ME1X255□1K5D37B	255	2.2	J,K,M	1500	41.0	33.5	19.5	37.5	1.0	UL,cUL,ENEC
ME1X275□1K5D37	275	2.7	J,K,M	1500	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
ME1X335□1K5D37A	335	3.3	M	1500	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
ME1X335□1K5D37B	335	3.3	J,K,M	1500	41.5	41.0	27.5	37.5	1.0	UL,cUL,ENEC
ME1X395□1K5D37	395	3.9	J,K,M	1500	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
ME1X445□1K5D37	445	4.4	J,K,M	1500	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
ME1X445□1K5D47	445	4.4	J,K,M	1500	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
ME1X445□1K5D52	445	4.4	J,K,M	1500	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
ME1X475□1K5D37A	475	4.7	M	1500	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
ME1X475□1K5D37B	475	4.7	J,K,M	1500	42.0	45.0	30.0	37.5	1.0	UL,cUL,ENEC
ME1X475□1K5D47	475	4.7	J,K,M	1500	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
ME1X475□1K5D52	475	4.7	J,K,M	1500	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
ME1X565□1K5D47	565	5.6	M	1500	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
ME1X565□1K5D52A	565	5.6	M	1500	57.0	38.0	24.0	52.5	1.0	UL,cUL,ENEC
ME1X565□1K5D52B	565	5.6	J,K,M	1500	57.0	45.0	30.0	52.5	1.0	UL,cUL,ENEC
ME1X685□1K5D47	685	6.8	J,K,M	1500	51.0	49.5	35.0	47.5	1.0	UL,cUL,ENEC
ME1X685□1K5D52A	685	6.8	J,K,M	1500	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
ME1X685□1K5D52B	685	6.8	M	1500	57.0	45.0	30.0	52.5	1.0	UL,cUL,ENEC
ME1X685□1K5D52C	685	6.8	M	1500	57.0	30.0	44.0	52.5	1.0	UL,cUL,ENEC
ME1X825□1K5D47	825	8.2	M	1500	51.0	49.5	35.0	47.5	1.0	UL,cUL,ENEC
ME1X825□1K5D52	825	8.2	J,K,M	1500	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
ME1X106□1K5D52A	106	10.0	M	1500	57.0	50.0	35.0	52.5	1.0	UL,cUL,ENEC
ME1X106□1K5D52B	106	10.0	J,K,M	1500	57.0	55.0	45.0	52.5	1.0	UL,cUL,ENEC

Note: 1. □: denotes tolerance code; 2. *: Contact Meritek for Part Number

EMI Suppression Capacitors X1 Class 1500VDC

ME1X-1K5D 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: $\leq 1V_{rms}$.	DF: $\leq 0.001(0.1\%)$ at 1KHz																	
Insulation resistance	Measured at 100V, 60 \pm 5 Sec	$C_r \leq 0.33\mu F$ IR $\geq 15,000M\Omega$ $C_r > 0.33\mu F$ IR $\geq 5,000M\Omega \cdot \mu F/C$																	
Solderability	Soldering temperature: $+235\pm 5^{\circ}C$ Immersion duration: 2 \pm 0.5sec	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 1sec 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 0.5hr 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/-0Hrs																		
Cold Resistance	Temperature: $-40\pm 3^{\circ}C$, Times: 2 \pm 1Hrs																		
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>$+20\pm 2^{\circ}C$</td> <td>3 min</td> </tr> <tr> <td>2</td> <td>$-40\pm 3^{\circ}C$</td> <td>30min</td> </tr> <tr> <td>3</td> <td>$+20\pm 2^{\circ}C$</td> <td>3 min</td> </tr> <tr> <td>4</td> <td>$+110\pm 2^{\circ}C$</td> <td>30min</td> </tr> <tr> <td>5</td> <td>$+20\pm 2^{\circ}C$</td> <td>3 min</td> </tr> </tbody> </table> After test, let rest for 1.5 \pm 0.5hr 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/-0hrs each direction	Appearance : No mechanical Damage Connection: Shall be no short or open																	
Soldering Heat Resistance	Preheat Temperature: 100~120 $^{\circ}C$ Preheat Duration: 60sec max Temperature increase by 3 $^{\circ}C$ /sec max Soldering Temperature: $+260\pm 5^{\circ}C$ Immersion Duration: 5 \pm 1sec Immersion Depth: 4 \pm 0.8mm from roots After test, allow it stay alone for 1.5 \pm 0.5hrs 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 X1 Class 1500VDC

ME1X-1K5D Series

MERITEK

RELIABILTY AND TEST CONDITIONS

Item	Test Condition	Requirement
Endurance	Duration: 1,000 hours, Temperature: $+110 \pm 2^{\circ}\text{C}$ 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 $47\Omega \pm 5\%$.	Appearance : No Visible Damage $\Delta C/C: \leq \pm 10\%$ of the value before test DF: ≤ 0.008 Max at 1KHz; for $C_r \leq 1\mu\text{F}$ DF: ≤ 0.005 Max at 1KHz; for $C_r > 1\mu\text{F}$ IR: $\geq 50\%$ of the rated value
Humidity Resistance	Test Temperature: $-40 \pm 2^{\circ}\text{C}$ Test Humidity: 87% to 93% R.H. Test Voltage: rated voltage Test Duration: 500 hours After test, allow it stay alone for 1.5 ± 0.5 hrs 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: ≤ 0.002 (0.2%) Max at 1KHz IR: $\geq 50\%$ 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: $-40 \sim 110^{\circ}\text{C}$
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.