

# EMI Suppression Capacitors X1 Class 300VAC

ME1X-300V 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    300V    xxx  
(1)        (2)        (3)        (4)        (5)



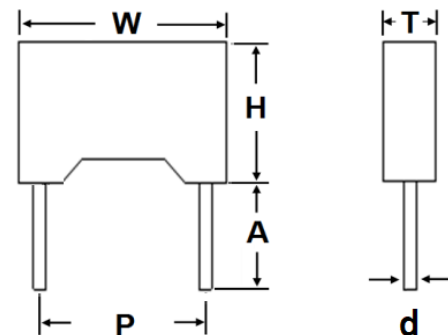
No	Item	Digit	Description	Reference
(1)	Meritek Series	ME1X	EMI Suppression Capacitors	X1 Class Safety Film Capacitor
(2)	Capacitance	223	223: 22000pF	First two digits: Significant, Third: Multiplier
(3)	Tolerance	K	K: $\pm 10\%$	$\pm 5\%$ (J), $\pm 20\%$ (M)
(4)	Rated Voltage	300V	300V: 300VAC	at 50~60Hz
(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	300VAC 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 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

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## ELECTRICAL SPECIFICATION – 300VAC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V <sub>AC</sub> )	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X102□300V75	102	0.0010	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X102□300V10	102	0.0010	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X102□300V15	102	0.0010	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X152□300V75	152	0.0015	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X152□300V10	152	0.0015	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X152□300V15	152	0.0015	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X222□300V75	222	0.0022	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X222□300V10	222	0.0022	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X222□300V15	222	0.0022	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X272□300V75	272	0.0027	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X272□300V10	272	0.0027	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X272□300V15	272	0.0027	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X332□300V75	332	0.0033	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X332□300V10	332	0.0033	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X332□300V15	332	0.0033	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X392□300V75	392	0.0039	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X392□300V10	392	0.0039	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X392□300V15	392	0.0039	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X472□300V75	472	0.0047	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X472□300V10	472	0.0047	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X472□300V15	472	0.0047	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X562□300V75	562	0.0056	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X562□300V10	562	0.0056	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X562□300V15	562	0.0056	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X682□300V75	682	0.0068	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X682□300V10	682	0.0068	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X682□300V15	682	0.0068	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X822□300V75	822	0.0082	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X822□300V10	822	0.0082	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X822□300V15	822	0.0082	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X103□300V75	103	0.010	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X103□300V10	103	0.010	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X103□300V15	103	0.010	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X123□300V75	123	0.012	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X123□300V10	123	0.012	J,K,M	300	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.

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## ELECTRICAL SPECIFICATION – 300VAC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V <sub>AC</sub> )	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X123□300V15	123	0.012	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X153□300V75	153	0.015	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X153□300V10	153	0.015	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X153□300V15	153	0.015	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X183□300V75	183	0.018	J,K,M	300	10.0	9.0	4.0	7.5	0.6	UL,cUL,ENEC
ME1X183□300V10	183	0.018	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X183□300V15	183	0.018	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X223□300V75	223	0.022	J,K,M	300	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X223□300V10	223	0.022	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X223□300V15	223	0.022	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X273□300V75	273	0.027	J,K,M	300	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X273□300V10	273	0.027	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X273□300V15	273	0.027	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X333□300V75	333	0.033	J,K,M	300	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X333□300V10	333	0.033	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X333□300V15	333	0.033	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X393□300V10	393	0.039	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X473□300V75	473	0.047	J,K,M	300	10.5	11.0	5.0	7.5	0.6	UL,cUL,ENEC
ME1X473□300V10	473	0.047	J,K,M	300	13.0	11.0	5.0	10.0	0.6	UL,cUL,ENEC
ME1X473□300V15	473	0.047	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X563□300V10	563	0.056	J,K,M	300	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
ME1X563□300V15	563	0.056	J,K,M	300	18.0	11.0	5.0	15.0	0.6	UL,cUL,ENEC
ME1X683□300V10	683	0.068	J,K,M	300	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
ME1X683□300V15	683	0.068	J,K,M	300	17.0	11.0	5.5	15.0	0.6	UL,cUL,ENEC
ME1X823□300V15	823	0.082	J,K,M	300	17.0	11.0	5.5	15.0	0.6	UL,cUL,ENEC
ME1X104□300V10	104	0.10	J,K,M	300	13.0	14.0	8.0	10.0	0.6	UL,cUL,ENEC
ME1X104□300V15	104	0.10	J,K,M	300	17.0	11.0	5.5	15.0	0.6	UL,cUL,ENEC
ME1X104□300V22	104	0.10	J,K,M	300	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X124□300V15	124	0.12	J,K,M	300	18.0	12.0	6.0	15.0	0.6	UL,cUL,ENEC
ME1X124□300V22	124	0.12	J,K,M	300	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X154□300V10A	154	0.15	J,K,M	300	13.0	12.0	6.0	10.0	0.6	UL,cUL,ENEC
ME1X154□300V10B	154	0.15	J,K,M	300	13.0	14.0	8.0	10.0	0.6	UL,cUL,ENEC
ME1X154□300V15	154	0.15	J,K,M	300	18.0	13.5	6.0	15.0	0.6	UL,cUL,ENEC
ME1X154□300V22	154	0.15	J,K,M	300	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X184□300V15	184	0.18	J,K,M	300	17.0	15.5	7.5	15.0	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.

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ME1X-300V Series

**MERITEK**

## ELECTRICAL SPECIFICATION – 300VAC

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
ME1X184□300V22	184	0.18	J,K,M	300	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X224□300V15	224	0.22	J,K,M	300	17.0	15.5	7.5	15.0	0.6	UL,cUL,ENEC
ME1X224□300V22A	224	0.22	J,K,M	300	25.0	14.5	6.0	22.5	0.8	UL,cUL,ENEC
ME1X224□300V22B	224	0.22	J,K,M	300	25.0	17.5	8.0	22.5	0.8	UL,cUL,ENEC
ME1X274□300V15	274	0.27	J,K,M	300	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
ME1X274□300V22	274	0.27	J,K,M	300	26.5	16.5	7.0	22.5	0.8	UL,cUL,ENEC
ME1X334□300V15	334	0.33	J,K,M	300	17.0	16.5	9.5	15.0	0.6	UL,cUL,ENEC
ME1X334□300V22	334	0.33	J,K,M	300	26.5	16.5	7.0	22.5	0.8	UL,cUL,ENEC
ME1X334□300V27	334	0.33	J,K,M	300	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC
ME1X394□300V22	394	0.39	J,K,M	300	26.5	17.0	8.5	22.5	0.8	UL,cUL,ENEC
ME1X394□300V27	394	0.39	J,K,M	300	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC
ME1X474□300V15	474	0.47	J,K,M	300	17.0	19.0	11.0	15.0	0.6	UL,cUL,ENEC
ME1X474□300V22	474	0.47	J,K,M	300	26.5	17.0	8.5	22.5	0.8	UL,cUL,ENEC
ME1X474□300V27	474	0.47	J,K,M	300	31.5	16.5	7.5	27.5	0.8	UL,cUL,ENEC
ME1X524□300V22	524	0.52	J,K,M	300	25.0	19.0	8.5	22.5	0.8	UL,cUL,ENEC
ME1X564□300V15	564	0.56	J,K,M	300	17.0	21.0	12.0	15.0	0.6	UL,cUL,ENEC
ME1X564□300V22	564	0.56	J,K,M	300	25.0	19.0	8.5	22.5	0.8	UL,cUL,ENEC
ME1X564□300V27	564	0.56	J,K,M	300	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X604□300V27	604	0.60	J,K,M	300	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X684□300V15	684	0.68	J,K,M	300	17.0	21.0	12.0	15.0	0.6	UL,cUL,ENEC
ME1X684□300V22	684	0.68	J,K,M	300	26.5	19.0	10.0	22.5	0.8	UL,cUL,ENEC
ME1X684□300V27	684	0.68	J,K,M	300	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X824□300V22	824	0.82	J,K,M	300	26.0	20.0	11.0	22.5	0.8	UL,cUL,ENEC
ME1X824□300V27	824	0.82	J,K,M	300	31.5	20.0	11.0	27.5	0.8	UL,cUL,ENEC
ME1X105□300V22	105	1.0	J,K,M	300	26.0	21.5	12.0	22.5	0.8	UL,cUL,ENEC
ME1X105□300V27A	105	1.0	J,K,M	300	30.0	21.0	11.5	27.5	0.8	UL,cUL,ENEC
ME1X105□300V27B	105	1.0	J,K,M	300	31.5	22.5	13.0	27.5	0.8	UL,cUL,ENEC
ME1X105□300V32	105	1.0	J,K,M	300	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X125□300V32	125	1.2	J,K,M	300	37.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X155□300V27	155	1.5	J,K,M	300	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
ME1X155□300V32	155	1.5	J,K,M	300	36.0	24.0	13.5	32.5	0.8	UL,cUL,ENEC
ME1X185□300V27	185	1.8	J,K,M	300	31.5	25.0	14.0	27.5	0.8	UL,cUL,ENEC
ME1X185□300V32	185	1.8	J,K,M	300	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
ME1X185□300V37	185	1.8	J,K,M	300	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
ME1X225□300V27	225	2.2	J,K,M	300	32.0	28.0	18.0	27.5	0.8	UL,cUL,ENEC

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## ELECTRICAL SPECIFICATION – 300VAC

Part Number	Cap Code	Cap	Tol	Volt	W	H	T	P	d	Safety
		(uF)	(%)	(V <sub>AC</sub> )	(mm)	(mm)	(mm)	(mm)	(mm)	Compliance
ME1X225□300V32	225	2.2	J,K,M	300	37.0	26.5	16.0	32.5	0.8	UL,cUL,ENEC
ME1X225□300V37A	225	2.2	J,K,M	300	41.0	26.0	12.0	37.5	1.0	UL,cUL,ENEC
ME1X225□300V37B	225	2.2	J,K,M	300	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
ME1X275□300V27	275	2.7	J,K,M	300	31.0	31.0	22.0	27.5	0.8	UL,cUL,ENEC
ME1X275□300V32	275	2.7	J,K,M	300	37.0	28.5	18.0	32.5	0.8	UL,cUL,ENEC
ME1X275□300V37	275	2.7	J,K,M	300	41.0	28.0	14.0	37.5	1.0	UL,cUL,ENEC
ME1X335□300V32	335	3.3	J,K,M	300	35.5	31.0	20.0	32.5	0.8	UL,cUL,ENEC
ME1X335□300V37	335	3.3	J,K,M	300	41.0	30.0	16.0	37.5	1.0	UL,cUL,ENEC
ME1X335□300V47	335	3.3	J,K,M	300	51.0	27.5	17.5	47.5	1.0	UL,cUL,ENEC
ME1X395□300V37	395	3.9	J,K,M	300	41.0	32.0	17.0	37.5	1.0	UL,cUL,ENEC
ME1X395□300V47	395	3.9	J,K,M	300	51.0	27.5	17.5	47.5	1.0	UL,cUL,ENEC
ME1X445□300V37	445	4.4	J,K,M	300	41.0	33.5	19.5	37.5	1.0	UL,cUL,ENEC
ME1X445□300V47	445	4.4	J,K,M	300	51.0	30.5	20.0	47.5	1.0	UL,cUL,ENEC
ME1X475□300V37	475	4.7	J,K,M	300	41.0	33.5	19.5	37.5	1.0	UL,cUL,ENEC
ME1X475□300V47	475	4.7	J,K,M	300	51.0	30.5	20.0	47.5	1.0	UL,cUL,ENEC
ME1X565□300V37	565	5.6	J,K,M	300	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
ME1X565□300V47	565	5.6	J,K,M	300	51.0	34.0	22.0	47.5	1.0	UL,cUL,ENEC
ME1X685□300V37	685	6.8	J,K,M	300	41.0	37.0	22.0	37.5	1.0	UL,cUL,ENEC
ME1X685□300V47	685	6.8	J,K,M	300	51.0	34.0	22.0	47.5	1.0	UL,cUL,ENEC
ME1X825□300V37	825	8.2	J,K,M	300	41.5	41.0	27.5	37.5	1.0	UL,cUL,ENEC
ME1X825□300V47	825	8.2	J,K,M	300	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
ME1X106□300V37	106	10.0	J,K,M	300	41.0	43.0	28.0	37.5	1.0	UL,cUL,ENEC
ME1X106□300V47A	106	10.0	J,K,M	300	51.0	43.5	29.0	47.5	1.0	UL,cUL,ENEC
ME1X106□300V47B	106	10.0	J,K,M	300	51.0	49.5	35.0	47.5	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.

## RELIABILITY AND TEST CONDITIONS

Item	Test Condition	Requirement
Capacitance	Measuring Frequency: ±2%, Measuring Voltage: ≤1Vrms.	Within the tolerance specified, at +20±5°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 <sub>AC</sub> for 2~5s; Min. 2KV <sub>AC</sub>	Within specified limits
Dissipation Factor	Measuring Frequency: ±2%, Measuring Voltage: ≤1Vrms.	D.F. : ≤0.001(0.1%) at 1KHz
Insulation resistance	Measured at 100V, 60±5 Sec	Cr≤0.33uF IR≥15,000MΩ Cr>0.33uF IR≥5,000MΩ*uF/C

# EMI Suppression Capacitors X1 Class 300VAC

ME1X-300V Series

**MERITEK**

## RELIABILTY AND TEST CONDITIONS

Item	Test Condition	Requirement																	
<b>Solderability</b>	Soldering temperature: +235±5°C Immersion duration: 2±0.5sec	More than 90% of circumferential surface of lead wire shall be covered with new solder																	
<b>Tensile Terminal Strength</b>	Apply 1.0Kg (10N) for 10±1sec to the terminal in the axial direction and acting in a direction away from the body.	Shall be no abnormality																	
<b>Damp Heat</b>	Temperature: +40°C ± 2°C, Relative Humidity: 90%~95% Time: 56days; After test, let rest for 1.5±0.5hr 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																	
<b>Dry Heat Resistance</b>	Temperature: 110°C ± 2°C, Times: 16 +1/-0Hrs																		
<b>Cold Resistance</b>	Temperature: -40±3°C, Times: 2±1Hrs																		
<b>Temperature Cycle</b>	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±2°C</td> <td>3 min</td> </tr> <tr> <td>2</td> <td>-40±3°C</td> <td>30min</td> </tr> <tr> <td>3</td> <td>+20±2°C</td> <td>3 min</td> </tr> <tr> <td>4</td> <td>+110±2°C</td> <td>30min</td> </tr> <tr> <td>5</td> <td>+20±2°C</td> <td>3 min</td> </tr> </tbody> </table> After test, let rest for 1.5±0.5hr at ordinary condition before making measurements.		Cycle	Temperature	Time	1	+20±2°C	3 min	2	-40±3°C	30min	3	+20±2°C	3 min	4	+110±2°C	30min	5	+20±2°C
Cycle	Temperature	Time																	
1	+20±2°C	3 min																	
2	-40±3°C	30min																	
3	+20±2°C	3 min																	
4	+110±2°C	30min																	
5	+20±2°C	3 min																	
<b>Vibration Resistance</b>	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																	
<b>Soldering Heat Resistance</b>	Preheat Temperature: 100~120°C Preheat Duration: 60sec max Temperature increase by 3°C/sec max Soldering Temperature: +260±5°C Immersion Duration: 5±1sec Immersion Depth: 4±0.8mm from roots 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: ≤ ±3% of the value before test DF: ≤ 0.002 (0.2%) Max at 1KHz IR: ≥ 50% of the rated value																	
<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.