



SPECIFICATION FOR APPROVAL

CUSTOMER

DESCRIPTION FILM CAPACITOR

TYPE MTE155J450VDC P = 22.5

DATE 25 MARCH 2019

PREPARED BY		APPROVED BY
QC 	SALES 	

ARITEC ELECTRONICS CO., LTD.

No.22 Soi Chalongkrung31 Lamplatiew Ladkrabang, Bangkok 10520

Tel : 66-2-3261215 ~ 7, 3260726, 7394078 ; Fax : 66-2-3260727

E-mail : aec.electronics1@gmail.com or aoom.323@gmail.com



ARITEC ELECTRONICS CO., LTD.

METALLIZED POLYESTER FILM CAPACITOR (MTE)

1. Scope :

This specification applied to capacitor for type MEF(Metallized Polyester Film Capacitor)

2. Operation Temperature :

-40°C ~ +85°C

3. Capacitance Range :

0.001uF ~ 15 uF

4. Capacitance Tolerance :

±2%(G) 、 ±3%(I) 、 ±5%(J) 、 ±10%(K) 、 ±20%(M)

5. Rated Voltage :

63VDC 、 100VDC 、 250VDC 、 400VDC 、 450VDC 、 500VDC 、 630VDC

6. Winday Part No. :

□□□□	□	□□□	□	□□□□	□	□	□□	□□
1	2	3	4	5	6	7	8	9
(tape)	(film thickness)	(capacitance)	(tolerance)	(rated voltage)	(Dc/Ac)	(lead forming)	(lead pitch)	(lead length)

6-1 tape :

Code	SPEI	SMEF	SMEM	SMPP	SPEN	SPPN	SPPS	SMXY	SMEC	SMET
Tape	PEI	MEF	MEM	MPP	PEN	PPN	PPS	X2	MEC	MET

6-2 Film Thickness :

Code	A	D	F	I	J	K	L	N
Thickness(μ)	1.9 μ	3.5 μ	4.8 μ	7.8 μ	11.8 μ	15 μ	18 μ	22 μ

6-3 Capacitance :

Code	101	102	103	104	105	106
Capacitance	0.0001uF	0.001uF	0.01uF	0.1uF	1uF	10uF

6-4 Tolerance :

Code	F	G	H	I	J	K	M
Tolerance	±1%	±2%	±2.5%	±3%	±5%	±10%	±20%



ARITEC ELECTRONICS CO., LTD. METALLIZED POLYESTER FILM CAPACITOR (MTE)

6-5 Rated Voltage : Showing the real working voltage indicated. For example : 0630 -> 630V, 1000 -> 1KV .

6-6 D→DC ; A→AC

6-7 Lead forming :

Code	B	K	R	U	W	T	S
Lead Forming						TAPING	Customer Special Require

6-8 Lead Pitch : Showing the capacitor lead pitch, For example :

Code	08	10	15	20	28	31
Pitch(mm)	7.5mm	10mm	15mm	20mm	27.5mm	31mm

6-9 Lead length : Showing the capacitor lead Length, For example :

Code	04	08	10	13	23	30	40
Length(mm)	4mm	8mm	10mm	13mm	23mm	30mm	40mm

7. Specifications (JIS 5115 、 IEC384-2)

No	Test items	Performance	Test Method
7-1	Withstand voltage (Between Terminals)	Shall be no abnormality	150% Of Rated Voltage, 60sec.
	Between terminal and Enclosure	Shall be no abnormality	UR × 200% + 1000VDC, 60sec.
7-2	Insulation resistance (Between Terminals)	$C_R \leq 0.33\mu F$ $IR \geq 15,000M\Omega$ $C_R > 0.33\mu F$ $IR \geq 5,000 (M\Omega \cdot \mu F)$	Measured at $100 \pm 15VDC$, For 60sec / $25^\circ C$



ARITEC ELECTRONICS CO., LTD.
METALLIZED POLYESTER FILM CAPACITOR (MTE)

No	Test items	Performance	Test Method
7-3	Capacitance	Within the tolerance specified	1KHz, 1Vrms Max. at 25°C
7-4	Dissipation Factor	0.025 (2.5%) Max.	50KHz, 1Vrms Max. at 25°C
7-5	Tense Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 1.0 Kg 2. Holding Time : 10 ± 1sec
7-6	Bending Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 0.5 Kg 2. Bending Time : 4 x 90° in 5sec
7-7	Vibration	(1) Appearance : No Visible Damage (2) Contact : Normal	a. Frequency change : 1min. per cycle 10~55~10Hz b. Vibration distance : 1.5mm c. course: X、Y、Z (axis) d. Time : 2h / axis (6h in total)
7-8	Solder-ability	75% Of The Surface Tinning	a. Solder temperature: 270±5°C b. Solder time: 2±0.5sec
7-9	Heat Shock test	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : ≤ ±3% of The Initial Value	The terminal of capacitor shall be immersed in the melting solder. a. Solder temperature: 270±5°C b. Solder time: 3±0.5sec c. Test Voltage: 150% of The Rate Voltage For 1min.



ARITEC ELECTRONICS CO., LTD.
METALLIZED POLYESTER FILM CAPACITOR (MTE)

No	Test items	Performance	Test Method
7-10	Cold Resistance	(1) Appearance : No Visible Damage (2) Capacitance Change : $\leq 0 \sim -10\%$ of The Initial Value	a. Test Temperature: -40°C b. Test Times: 2Hrs
7-11	Dry Heat Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq +5 \sim -2\%$ Of The Initial Value (4) Insulation Resistance: $C_R \leq 0.33\mu\text{F}$ $IR \geq 2,700\text{M}\Omega$ $C_R > 0.33\mu\text{F}$ $IR \geq 900\text{M}\Omega$	a. TEST TEMPERATURE: $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. Test Times: 2Hrs
7-12	Humidity Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 10\%$ of The Initial Value (4) Insulation Resistance: $C_R \leq 0.33\mu\text{F}$ $IR \geq 2,700\text{M}\Omega$ $C_R > 0.33\mu\text{F}$ $IR \geq 900\text{M}\Omega$ (5) $DF (\tan \delta) \leq 0.01$	a. TEST TEMPERATURE: $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. RELATIVE HUMIDITY: $90 \sim 95\%$ c. Test Times: $240 \pm 8\text{HRS}$ d. TEST VOLTAGE: 130% of The Rated Voltage for 1 min.



ARITEC ELECTRONICS CO., LTD.
METALLIZED POLYESTER FILM CAPACITOR (MTE)

9. Marking :



WDC	WINDAY CO. LOGO
155	CAPACITANCE
J	CAPACITANCE TOLERANCE
450V	RATED VOLTAGE
TE	METALLIZED POLYESTER FILM

10.Storage conditions and duration

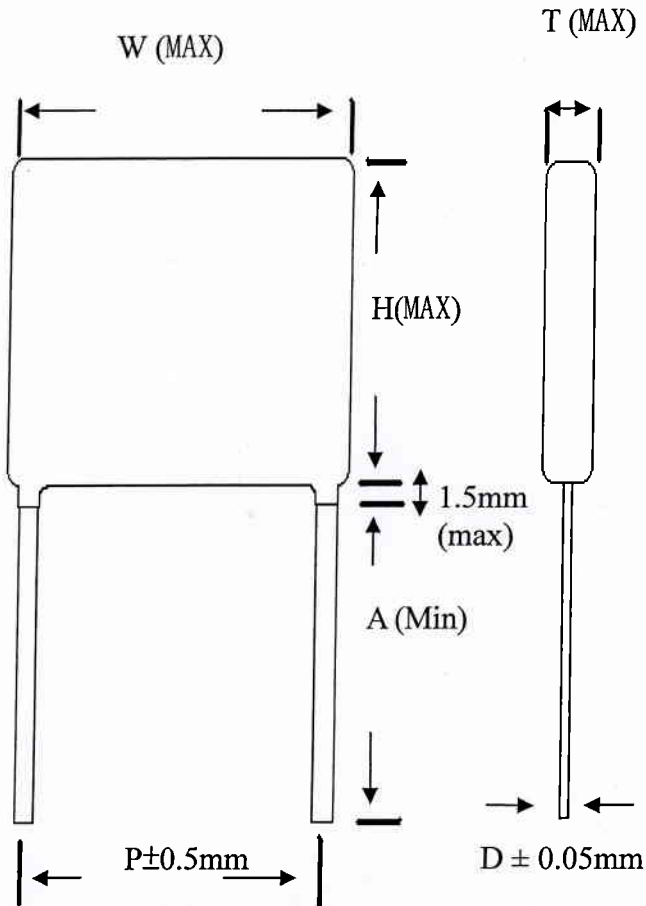
Packaged capacitors should be kept in clean, ventilated, dry coffers, not near the heat source, not subject to direct sunlight, is strictly prohibited and chemical reagents, acid and harmful gas storage together.

Capacitor at a temperature within the range 20 ~ 25 °C, humidity less than 50% of the state of storage for one year.



ARITEC ELECTRONICS CO., LTD. METALLIZED POLYESTER FILM CAPACITOR (MTE)

8. Dimensions:

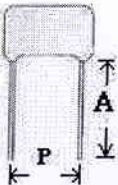
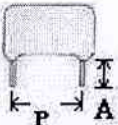
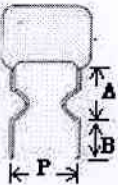
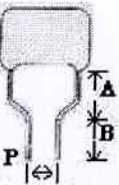


MTE155J450VDC (P = 22.5)

CAPACITOR BODY SIZE (Unit:mm)

CAP	RV	W (MAX)	H (MAX)	T (MAX)	D (±0.05)
155J	450V	25.7	17.6	7.5	0.8

Lead Style

B		K	R	U	W	T		S		
						TAPING (refer to next page)		Customer Require		
CAP	RV	Lead Style	A(±0.5mm)		B(±0.5mm)				P(±0.5mm)	
155J	450V	B	A=23						P=22.5	