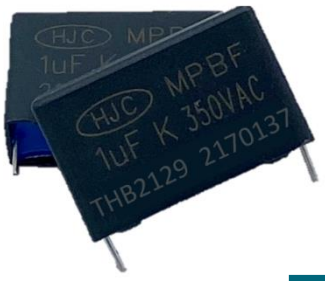


MPBF-U SERIES

MKP AC-FILTER CAPACITOR

METALLIZED POLYPROPYLENE CAPACITOR ▲ THT type
High frequency capability
AEC-Q200 on request, contact MGT for more details
Self-healing property
Optimized AC voltage performance
Temperature Humidity Bias (THB) 1000 hours tested

SPECIFICATION

Item		Characteristics		
Related Documents		IEC 61071 / 60068		
Rated Temperature Range		-40°C to +85°C		
Usable Temperature Range Note 1		-40°C to +105°C		
Capacitance Range	C_R	1.0µF to 40µF		
Capacitance Tolerance	ΔC	±5% ▲ ±10%		
Nominal DC Voltage at 85°C	$V_{N\,DC}$	480V_{DC}	550V_{DC}	650V_{DC}
Nominal AC Voltage at 85°C	$V_{N\,AC}$	250V_{AC}	300V_{AC}	350V_{AC}
Operating AC Voltage at 105°C	$V_{OP\,AC}$	170V_{AC}	210V_{AC}	240V_{AC}
Peak Current	I_{PEAK}	68A to 1050A		
RMS Current Note 2	I_{RMS}	3A to 26A		
Equivalent Series Resistance Note 3	ESR	4.5mΩ to 80mΩ		
Maximum Pulse Rise Slope dV/dt (V/µs)	Pitch (mm)	250V_{AC}	300V_{AC}	350V_{AC}
	27.5	68	100	120
	37.5	35	50	70
	52.5	15	50	40

Note:

1: **With specified voltage derating**
2: **Measured at 10kHz**
3: **Measured at 10kHz**

APPLICATIONS

Harmonic Filter	Industrial	Motors & Drives	Renewable Energy	Traction	UPS Systems	Welding Inverter

ELECTRICAL CHARACTERISTICS

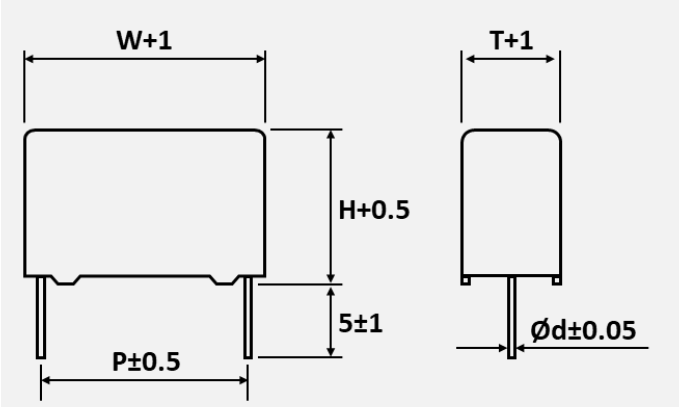
$V_{N\ AC}$ at 85°C	C_R (µF)	Dimensions (mm) W	H	T	P (mm)	P1 (mm)	Ød (mm)	dV/dt (V/µs)	I_{PEAK} (A)	ESR at 10kHz (mΩ)	I_{RMS} at 10kHz (A) Note 1	SPQ Note 2 (pcs)	Part Number Note 3
250V_{AC}	1	31	18	9	27.5	-	0.8	68	68	80	3	252	MPBF105□0250AB127BU
	1.5	31	20	10	27.5	-	0.8	68	102	35	4	207	MPBF155□0250AB127BU
	2.2	31	22	13	27.5	-	0.8	68	150	30	5	171	MPBF225□0250AB127BU
	3.3	31	24.5	15	27.5	-	0.8	68	225	20	8	153	MPBF335□0250AB127BU
	4.7	31	33	18	27.5		0.8	68	320	15	10	126	MPBF475□0250AB127BU
	5	31	33	18	27.5	-	0.8	68	340	12	11	126	MPBF505□0250AB127BU
	7.5	31	37	22	27.5	-	0.8	68	510	9	13	99	MPBF755□0250AB127BU
	10	41.5	35.5	22.5	37.5	10.2	1.2	35	350	10	13	70	MPBF106□0250AB137BU–F
	10	41.5	35.5	22.5	37.5	-	1	35	350	11	12	70	MPBF106□0250AB137BU
	14	41.5	38	28	37.5	10.2	1.2	35	490	8	14	56	MPBF146□0250AB137BU–F
	14	41.5	38	28	37.5	-	1	35	490	9	13	56	MPBF146□0250AB137BU
	15	41.5	38	28	37.5	20.3	1.2	35	525	6	14	56	MPBF156□0250AB137BU–FF
	15	41.5	38	28	37.5	-	1	35	525	7	13	56	MPBF156□0250AB137BU
	20	41.5	45	30	37.5	20.3	1.2	35	700	5	16	56	MPBF206□0250AB137BU–FF
	20	41.5	45	30	37.5	-	1	35	700	5.5	15	56	MPBF206□0250AB137BU
	30	41.5	53	38	37.5	-	1	35	1050	4.5	20	42	MPBF306□0250AB137BU
	30	41.5	53	38	37.5	20.3	1.2	35	1050	4.5	21	42	MPBF306□0250AB137BU–FF
	25	58	45	30	52.5	20.3	1.2	15	375	9	18	40	MPBF256□0250AB152BU–FF
	30	58	50	35	52.5	20.3	1.2	15	450	8	20	35	MPBF306□0250AB152BU–FF
	35	58	50	35	52.5	20.3	1.2	15	525	7	23	35	MPBF356□0250AB152BU–FF
	40	58	50	35	52.5	20.3	1.2	15	600	6	25	35	MPBF406□0250AB152BU–FF

Note:

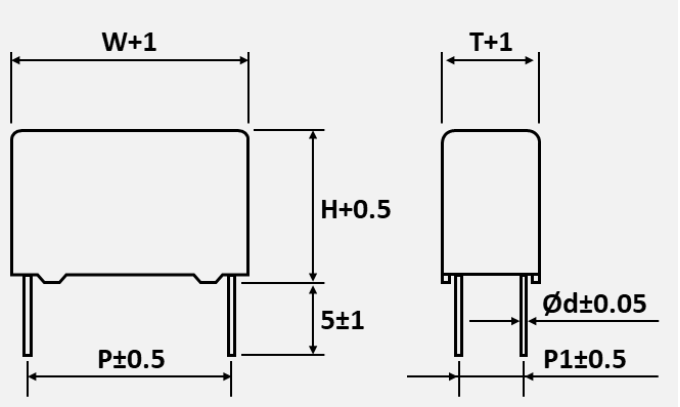
1. I_{RMS} at 70°C
2. SPQ = Standard Pack Quantity in pcs
3. Enter the appropriate tolerance code □ from the product code table

PACKAGE OUTLINE ▲ All dimensions in mm

2-Pin Version



4-Pin Version



ELECTRICAL CHARACTERISTICS

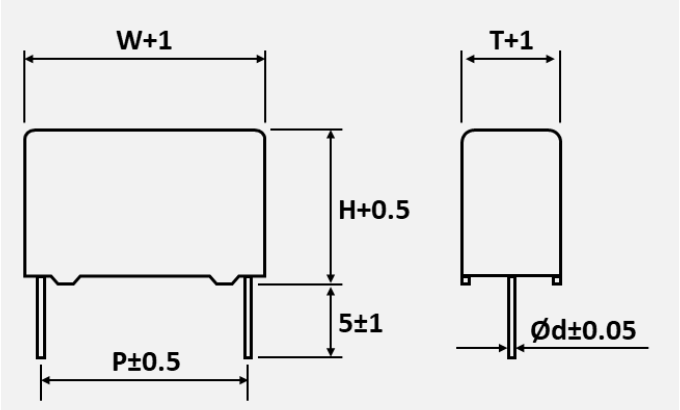
$V_{N\,AC}$ at 85°C	C_R (µF)	Dimensions (mm) W	H	T	P (mm)	P1 (mm)	Ød (mm)	dV/dt (V/µs)	I_{PEAK} (A)	ESR at 10kHz (mΩ)	I_{RMS} at 10kHz (A) Note 1	SPQ Note 2 (pcs)	Part Number Note 3
300V_{AC}	1	31	20	10	27.5	-	0.8	100	100	40	3	207	MPBF105□0300AB127BU
	1.5	31	23.5	14	27.5	-	0.8	100	150	28	4.5	162	MPBF155□0300AB127BU
	2.2	31	24.5	15	27.5	-	0.8	100	200	21	6.5	153	MPBF225□0300AB127BU
	3.3	31	33	18	27.5	-	0.8	100	300	13	10	126	MPBF335□0300AB127BU
	4	31	31	22	27.5	-	0.8	100	400	12	11	99	MPBF405□0300AB127BU
	4.7	31	37	22	27.5	-	0.8	100	500	10	13	99	MPBF475□0300AB127BU
	5	31	37	22	27.5	-	0.8	100	500	10	13	99	MPBF505□0300AB127BU
	4.7	41.5	30	18	37.5	-	1	50	235	25	8	96	MPBF475□0300AB137BU
	6.8	41.5	35.5	22.5	37.5	-	1	50	340	10	11	70	MPBF685□0300AB137BU
	7.5	41.5	35.5	22.5	37.5	10.2	1.2	50	375	10	12	70	MPBF755□0300AB137BU–F
	7.5	41.5	35.5	22.5	37.5	-	1	50	375	10.5	11	70	MPBF755□0300AB137BU
	8	41.5	39	24	37.5	-	1	50	400	10	11	66	MPBF805□0300AB137BU
	10	41.5	38	28	37.5	10.2	1.2	50	500	9	14	56	MPBF106□0300AB137BU–F
	10	41.5	38	28	37.5	-	1	50	500	10	13	56	MPBF106□0300AB137BU
	13	41.5	45	30	37.5	20.3	1.2	50	650	6	16	56	MPBF136□0300AB137BU–FF
	13	41.5	45	30	37.5	-	1	50	650	7	15	56	MPBF136□0300AB137BU
	15	41.5	45	32	37.5	20.3	1.2	50	750	7	16	49	MPBF156□0300AB137BU–FF
	18	58	45	30	52.5	20.3	1.2	50	900	6	17	40	MPBF186□0300AB152BU–FF
	20	58	45	30	52.5	20.3	1.2	35	700	6	18	40	MPBF206□0300AB152BU–FF
	25	58	50	35	52.5	20.3	1.2	35	875	5	21	35	MPBF256□0300AB152BU–FF
	35	58	60	40	52.5	20.3	1.2	30	1050	4.5	25	30	MPBF356□0300AB152BU–FF

Note:

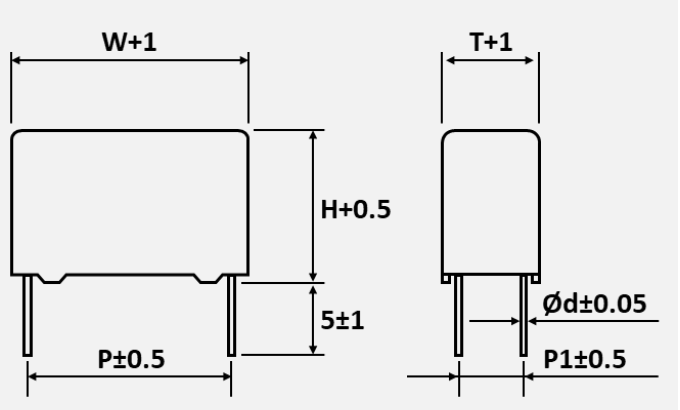
1. I_{RMS} at 70°C
2. SPQ = Standard Pack Quantity in pcs
3. Enter the appropriate tolerance code □ from the product code table

PACKAGE OUTLINE ▲ All dimensions in mm

2-Pin Version



4-Pin Version



ELECTRICAL CHARACTERISTICS

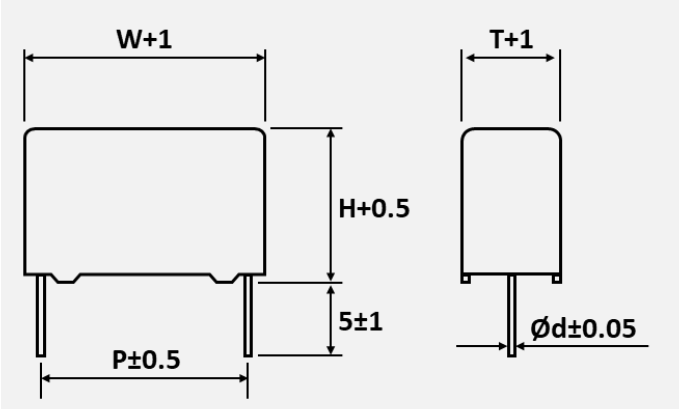
$V_{N\ AC}$ at 85°C	C_R (µF)	Dimensions (mm) W	H	T	P (mm)	P1 (mm)	Ød (mm)	dV/dt (V/µs)	I_{PEAK} (A)	ESR at 10kHz (mΩ)	I_{RMS} at 10kHz (A) Note 1	SPQ Note 2 (pcs)	Part Number Note 3
350V_{AC}	1	31	22	13	27.5	-	0.8	120	120	35	4	171	MPBF105□0350AB127BU
	2	31	28	18	27.5	-	0.8	120	240	30	7	126	MPBF205□0350AB127BU
	2.2	31	28	18	27.5	-	0.8	120	264	30	7	126	MPBF225□0350AB127BU
	3	31	31	22	27.5	-	0.8	120	360	28	9	99	MPBF305□0350AB127BU
	3.3	31	37	22	27.5	-	0.8	120	396	26	9	99	MPBF335□0350AB127BU
	4	32	38	24	27.5	-	0.8	120	480	12	11.5	90	MPBF405□0350AB127BU
	4.7	31	40	25	27.5	-	0.8	120	564	12	12	90	MPBF475□0350AB127BU
	5	32	50	22	27.5	-	0.8	120	600	10	14	99	MPBF505□0350AB127BU
	5	41.5	38	21	37.5	-	1	70	350	10	10.5	78	MPBF505□0350AB137BU
	6	41.5	39	24	37.5	-	1	70	420	8	11.5	66	MPBF605□0350AB137BU
	6.8	41.5	44	24	37.5	-	1	70	476	8	12	66	MPBF685□0350AB137BU
	7.5	41.5	41	27.5	37.5	10.2	1.2	70	525	7.5	15	60	MPBF755□0350AB137BU–F
	8	41.5	41	27.5	37.5	-	1	70	560	7	15	60	MPBF805□0350AB137BU
	8	41.5	44	24	37.5	-	1	70	560	7	13	56	MPBF805□0350AB137BU
	10	41.5	44	24	37.5	-	1	70	700	9	14	56	MPBF106□0350AB137BU
	10	41.5	45	32	37.5	-	1	70	700	6	19	54	MPBF106□0350AB137BU
	15	42	55	36	37.5	20.3	1.2	70	1050	4.5	20	30	MPBF156□0350AB137BU–FF
	12	58	45	30	52.5	-	1	40	480	7	16	40	MPBF126□0350AB152BU
	15	58	47	32	52.5	20.3	1.2	40	600	7	18.5	40	MPBF156□0350AB152BU–FF
	15	58	50	30	52.5	10.2	1.2	40	600	7	18.5	40	MPBF156□0350AB152BU–FF
	20	58	53	38	52.5	20.3	1.2	40	800	6	22	30	MPBF206□0350AB152BU–FF
	22	58	55	40	52.5	20.3	1.2	40	880	5	24	30	MPBF226□0350AB152BU–FF
	25	58	60	40	52.5	20.3	1.2	40	1000	5	26	30	MPBF256□0350AB152BU–FF

Note:

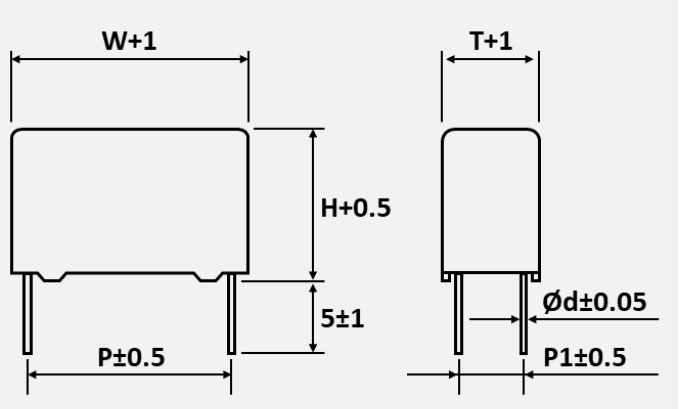
1. I_{RMS} at 70°C
2. SPQ = Standard Pack Quantity in pcs
3. Enter the appropriate tolerance code □ from the product code table

PACKAGE OUTLINE ▲ All dimensions in mm

2-Pin Version

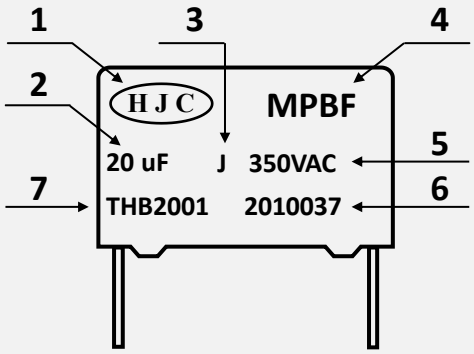


4-Pin Version



PRODUCT MARKING

Marking	Details



No.	Description
1	Manufacturer Logo
2	Nominal capacitance in µF
3	Capacitance tolerance
4	Series name
5	DC rated voltage
6	Lot number
7	Date code

DATE CODE

Example:

Date code

2001: 2001 = 1st week of 2020

Lot number

2010037: 20 = Year, here 2020
1 = Month, here January
0001 to XXXX = Serial number

20		01	
Year		Week	
19	2019	01	1st
20	2020	02	2nd
21	2021	03	3rd
22	2022	04	4th
23	2023	05	5th
...	...	...	...
30	2030	53	53rd

PRODUCT CODE

Example: MPBF-U **(85/85/1000h)** series ▲ 20µF ▲ 350V_{AC} ▲ ±5% ▲ P=52.5mm ▲ 4-Pins ▲ P1=20.3mm ▲ Bulk ▲ Straight leads ▲ 5mm lead length

MPBF	206	J	1100	D	B	1	52	B	U	-FF

Series		Capacitance Code Note1 (pF)		Capacitance Tolerance (%)		Rated Voltage (V_{DC})		Voltage Type		Packaging Type		Lead Configuration Note2		Pitch (mm)		Lead Length (mm)		Special Remark Note 3		Special Terminal (4 Pins)	
Code	Series	Code	µF	Code	Tol.	Code	VDC	Code	Type	Code	Type	Code	Style	Code	mm	Code	mm	Code	Type	Code	P1 (mm)
HPB	HPB	105 505 106 276 606	1.0 5.0 10.0 27.0 60.0	J K	±5 ±10	0250 0300 0350	250 300 350	A	AC	B	Bulk	1	SL	27 37 52	27.5 37.5 52.5	B	5.0	U	See Note 3	F 2F FF	10.2 12.7 20.3

Note:

1 **Capacitance code expressed in pF. The first two digits represent significant figures. The last digit specifies the total number of zeros to be added.**

2 **SL = Straight leads**

3 **U = High temperature & humidity load type. Temperature Humidity Bias (THB) 1000 hours tested.**

REFERENCE DATA

Fig. 1 ▪ Capacitance Drift vs. Ambient Temperature

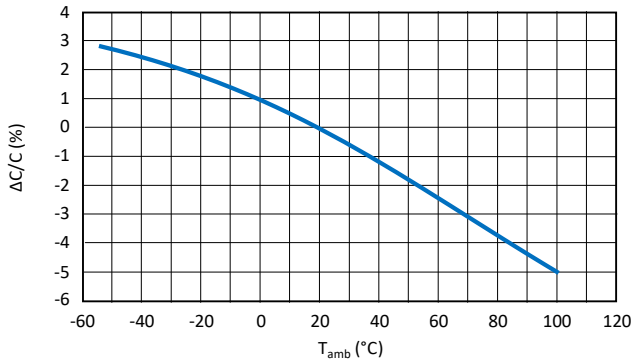
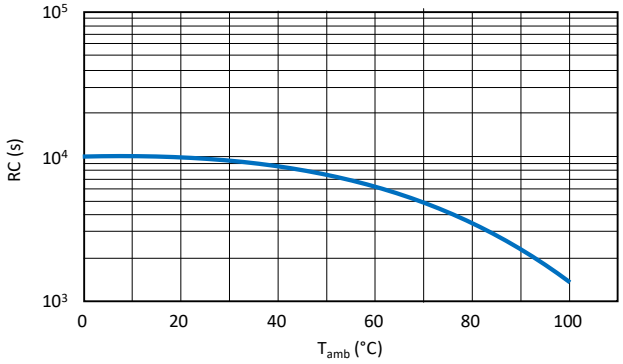


Fig. 2 ▪ Insulation Resistance vs. Ambient Temperature



HEAT CONDUCTIVITY

In order not to exceed the maximum allowed case temperature rise (ΔT), the formula used to calculate the maximum power that may be dissipated by the capacitor is:

Rise of the case temperature in °C:

$$\Delta T = T_{CASE} - T_{AMBIENT}$$

$$\Delta T = \frac{P}{G}$$

With G, the heat conductivity of the capacitor in mW/°C.

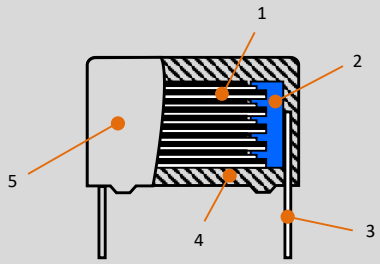
Maximum power that may be dissipated by the capacitor in mW:

$$P = {I_{RMS}}^2 \cdot ESR$$

The power-dissipation must be limited so that the case-temperature in the application never exceeds 105°C (observing voltage-derating).

Dimensions (mm)			G (mW/°C)
W	H	T	
31	18	9	31
31	20	9	36
31	22	11	41
31	24.5	15	46
31	28	18	54
31	33	18	58
31	30.5	20	59
31	31	22	62
31	37	22	68
41.5	35	20	63
41.5	35.5	20.5	68
41.5	39	24	73
41.5	41	27.5	85
41.5	38	28	83
41.5	45	30	93
41.5	45	32	95
58	45	30	95
58	50	35	108
58	53	38	115

TECHNICAL SPECIFICATION

No.	Category	Specification		
1	Scope	This specification applies to capacitors for High performance AC filtering applications. Reference standards: IEC 61071 / IEC 60068		
2	Product Name	Metallized polypropylene film capacitor, Type MPBF		
3	Construction	Dimensions:	Refer to dimensions drawing	
				
		1 = Element	Metallized Polypropylene film	
		2 = Metal spray	Special solder. (Lead Free) compliant to RoHS directive	
		3 = Lead wire	Tinned wire. (Lead Free) compliant to RoHS directive	
		4 = Inner coating	Epoxy resin filled. (UL-94V-0 Standard)	
		5 = Outer coating	Plastic case. (UL-94V-0 Standard)	
4	Atmospheric and Temperature Characteristics	**Standard atmospheric conditions.** Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests is as follows:		
		Ambient temperature:	15 to 35°C	
		Relative humidity	25% to 75%	
		Air pressure	86 to 106 kPa	
		If there may be any doubt on the results, measurements shall be made within the following limits.		
		Ambient temperature:	20°C ± 5°C	
		Relative humidity:	Below 50%	
		Operating temperature range		
		Lowest operating temperature:	-40°C	
		Maximum operating temperature:	+105°C (case-temperature) with specified voltage-derating	
		The capacitor can be operated up to 105°C case-temperature (according to the power to be dissipated). The temperature is measured at the hottest point of the case when the capacitor has reached its thermal equilibrium.		
5	Electrical Characteristics	**All data given at an ambient temperature of 23°C ± 1°C and a relative humidity of 50% ± 2%%, unless otherwise specified.**		
		Rated temperature:	+85°C	
		Category voltage (V_C):	Up to 85°C; $V_C = V_R$	
			For temperature between +85°C and +105°C, a decreasing factor of 1.5% per degree °C on the nominal voltage V_R must be applied.	
		Capacitance range:	1µF to 40µF	
		Capacitance tolerance:	±5% (J), ±10% (K), ±20% (M)	Measured at 1kHz, 1V
		Self-inductance (L_S)	< 1nH per mm of lead spacing	

TECHNICAL SPECIFICATION

No.	Category	Specification	
5	Electrical Characteristics	**Insulation resistance between terminals**	
		Test conditions:	
		Temperature:	20°C ± 5°C
		Voltage charge:	$100V_{DC}$ (V_{NDC} ≤ 500V)
			$500V_{DC}$ (V_{NDC} > 500V)
		Performance:	After voltage charge 1 minute > 10GΩ x µF
		Test voltage between terminals	
		1.5 × V_{NDC} applied for 10 sec, at 20°C ±5°C	
		Cut off current:	10mA, slow up voltage speed ≤ 100V/sec
		Current limiting resistance of 1Ω/V shall be connected to the test circuit	
		Performance:	There shall be no dielectric breakdown or other damage
		Test voltage between terminal and case	
		$2000V_{AC}$ (50Hz) applied for 10 sec	
		Performance:	There shall be no flashover or other damage

No.	Category	Specification			
6	Mechanical Characteristics	**Test Item**	**Conditions**		**Performance**
		Robustness of terminations (IEC68-2-21)	Tensile Ua1		There shall be no such mechanical damage as terminal damage etc.
			Wire diameter	Section	Load
			≤ 0.8mm	≤ 0.5mm²	10N
			≤ 1.25mm	≤ 1.2mm²	20N
			Duration: 10s ± 1s		
			Bending Ub methode 1		
			Wire diameter	Section	Load
			≤ 0.8mm	≤ 0.5mm³	10N
			≤ 1.25mm	≤ 0.019mm³	20N
			4 × 90°; Duration: 2s to 3 s/bend		
		Vibration proof (IEC68-2-6)	10Hz to 55Hz: amplitude ± 0.35mm or acceleration 98m/s²		No visible damage
			Test duration: 10 frequency cycles, 3 axes offset from each other by 90° 1 octave/min Visual examination		

TECHNICAL SPECIFICATION

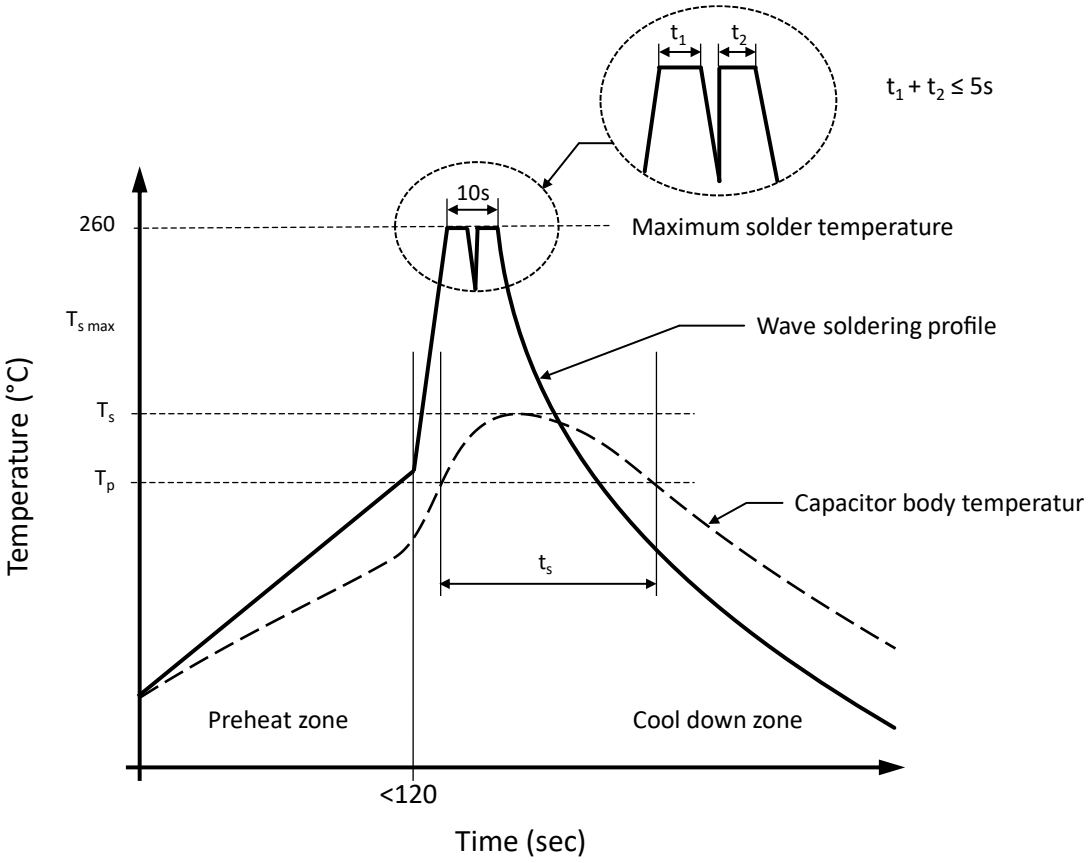
No.	Category	Specification		
		Test Item	**Conditions**	**Performance**
7	**Endurance Characteristics**	Solderability (IEC68-2-20 Ta)	Solder bath: 245°C ± 5°C Immersion time:2.5±0.5sec Visual examination	At least 95% of the circumferential face of lead wire up to immersed level shall be covered with new solder
		Resistance to soldering heat (IEC 68-2-20Tb)	Solder bath: 260 °C ± 5 °C Immersion time:10±1sec Thickness of heat shunt (Printed wiring board): 1.6mm Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 1% Increase of tan δ ≤ 50×10^{-4}
		Voltage test between terminal	1.5 × V_{RDC} at ambient temperature. Duration 60sec Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 0.5% Increase of tan δ ≤ 1.2 initial $\tan\delta_0 + 1\times10^{-4}$ R insulation ≥ 50 % of specified values
		Surge discharge test	1.1 × V_{NDC} Number of discharges: 5 Time lapse: every 2 min (10min total). Within 5 min after the surge discharge test, the units shall be subjected to a voltage test between terminals Duration 60sec 1.5 × V_{NDC} at ambient temperature. Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 1% tan δ ≤ 1.2 initial tan $\delta_0 + 1 \times 10^{-4}$
		Change of temperature (IEC68-2-14) Test Nb	Test Nb T_{MAX} = 85°C T_{MIN} = - 40°C Transition time: 1 h, equivalent to 1°C/min 5 cycles Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 2 % Increase of tan δ ≤ 150×10^{-4}
		Damp heat steady state (IEC68-2-78)	Test Ca T_{MAX} = 40 ± 2°C RH = 93 ± 3 % Duration 56 days 1.5 × V_{NDC} at ambient temperature Duration 60sec Visual examination Capacitance at 1kHz tan δ at 10kHz	No puncturing or flashover Self-healing punctures are permitted. |ΔC/C| ≤ 2.0% Increase of tan δ ≤ 150×10^{-4}
		Self-healing test	1.5 × V_{NDC} Duration 10sec Number of clearings ≤ 5 Clearing = voltage drop of 5 % increase the voltage at 100 V/s till 5 clearings occur with a max. of 2.5 × V_{NDC} for a duration of 10sec. Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 0.5% tan δ ≤ 1.2 x initial tan $\delta_0 + 1 \times 10^{-4}$

TECHNICAL SPECIFICATION

No.	Category	Specification		
7	**Endurance Characteristics**	**Test Item**	**Conditions**	**Performance**
		Thermal stability test under overload conditions	Natural cooling T_{AMB} ± 5°C 1.21 × P_{MAX} 1.1 × I_{MAX} (I_{MAX} see specific reference data) Test duration 48h. Measure the temperature every 1.5h during the last 6 h. Capacitance at 1kHz tan δ at 10kHz	Temperature rise < 1°C |ΔC/C| ≤ 2% Increase of tan δ ≤ 1.2 initial tan δ_0 +150 × 10^{-4}
		Endurance test between terminals	Sequence 1.25 × V_{NDC} at T_{MAX} = 85 °C Duration 500 h 1000 × discharge at 1.4 × I (maximum repetitive peak current in continuous operation) 1.25 × V_{NDC} at T_{MAX} = 85 °C Duration 500h Capacitance at 1kHz tan δ at 10kHz	|ΔC/C| ≤ 3% Increase of tan δ ≤ 150 × 10^{-4}
		Destruction test sequence	At T_{MAX} = 85°C	No puncturing or flashover Self-healing punctures are permitted
		High DC voltage test	Switch to high DC voltage = 2 × V_{NDC} Duration 5sec	
		High AC voltage test	Switch to high AC voltage = V_{NDC} / 2√2 Duration 5min	
			Repeat destruction sequence 3 times. Visual examination	
		Damp heat with load	Humidity: 85%RH ± 2%RH Temperature: 85°C ±2°C Test voltage: When $V_{N\,AC}$ = 350V_{AC}, the test voltage is 305V_{AC} When $V_{N\,AC}$ = 300VAC, the test voltage is 250V_{AC} Test time: 1000h	|ΔC/C| ≤ 10% Increase of tan δ ≤ 3.5% (1kHz)

No.	Category	Specification
8	**Storage conditions**	It should be noted that the solderability of the terminals may be deteriorated when stored barely in an atmosphere for a long period.
		It should not be located in particularly high temperature and high humidity, it must submit to the following conditions (Keeping in the original package) Temperature: 5°C to 35°C Relative humidity: ≤ 70% Storage period: ≤ 12 months (Following the manufacturing date marked on the label in package bag)
		Avoid wetting the capacitor by water, oil, salt and/or poisonous gas.
		If used the capacitor that overdue the storage time, it should be test, the characteristics of the capacitor or contact with our technical engineer.

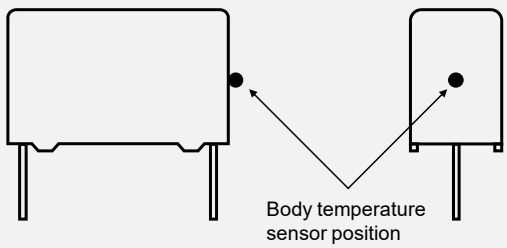
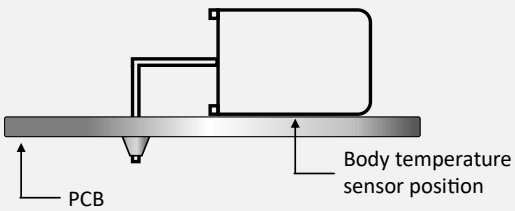
RECOMMENDED WAVE SOLDERING PROFILE ▲ THT PACKAGE



Capacitor body temperature should follow the description below:

Profile Features		Polypropylene Film Capacitor	Polyester Film Capacitor
Capacitor body maximum temperature at preheating	T_P	≤ 110°C / 120 seconds	≤ 125°C / 120 seconds
Capacitor body maximum temperature at wave soldering	T_S	≤ 120°C / t_s ≤ 45 seconds	≤ 150°C / t_s ≤ 45 seconds

DETERMINING THE CAPACITOR BODY TEMPERATURE

Vertical Mounting	Horizontal Mounting
	
The body temperature sensor position is defined as the highest temperature point around the capacitor body.	If there is 90 degree bending product, the sensor position shall between product and PCB

SOLDERING SUGGESTIONS

When solder a capacitor, heat in soldering is conducted to the element of the capacitor from wire lead and an enclosure, and hence it should be noted that soldering under high temperature and a long period may cause deterioration of breakdown of capacitors. Be sure to solder within the recommended temperature condition range.

HAND SOLDERING

a.) Soldering iron top temperature: ≤ 350°C
b.) Soldering time: ≤ 3sec

If re-work or dipping twice in necessary, it should be done after the capacitor returned to the normal temperature. Suggestion time is 24 hours.

THT film capacitors are not suitable for reflow soldering.

When SMD components are used together with film capacitor, the film capacitor should not pass into the SMD adhesive curing oven. The film capacitor should be assembled after the SMD process.

In order to ensure proper conditions for manual or selective soldering, the body (surface) temperature of the film capacitor (T_s) must be ≤ 120°C.

REVISION TABLE

Revision	Date	Status	Notes
001	01/10/2021	Initial release	Initial publication

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It is subject to the user's duty of care to design and validate his products in such a way that appropriate measures are taken, such as protective circuits or redundant systems to ensure the safety standards required in the application.

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