



SPECIFICATION FOR APPROVAL

File No.: Q/FRK 0.GS.E.C25-C13

Product Name	Uncoated Metallized Polyester Film Capacitor(Stacked version)
Product Type	C25(CL25 Series)
Product Code	
Customer	
Customer Code	
Issue Date	2023-05

Xiamen Faratronic Co. Ltd.			Approved by Customer
Drafted	Checked	Approved	



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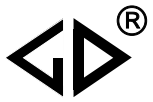
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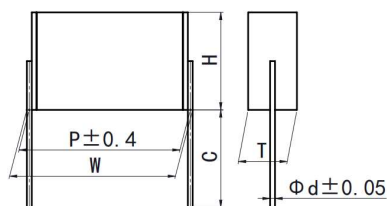


Version history

Current version	Date	Author	Change description

Uncoated Metallized Polyester Film Capacitor(Stacked version, uncoated)

■ Outline Drawing



■ Features

- metallized polyester film, stacked construction, Uncoated
- High impulse and pulse strength

■ Typical Applications

- DC impulse and pulse circuits
- SMPS, converter, Electronic ballasts, compact fluorescent lamps

■ Specifications

Reference Standard	GB/T 7332(IEC 60384-2)				
Climatic Category	55/125/56				
Rated Temperature	85°C				
Operating Temperature Range	-55°C~125°C (+85°C to +125°C: decreasing factor 1.25% per °C for U_R)				
Rated Voltage	63V, 100V, 250V, 400V, 630V, 1 000V				
Capacitance Range	0.0010 μ F~10.0 μ F				
Capacitance Tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K), $\pm 20\%$ (M)				
Voltage Proof	1.40 U_R (2s)				
Dissipation Factor	Frequency	$C_N \leq 0.1\mu F$	$C_N > 0.1\mu F$		
	1kHz	$\leq 1.0\%$	$\leq 1.0\%$		
	10kHz	$\leq 1.5\%$	-		
	100kHz	$\leq 3.0\%$	-		
Insulation Resistance	$U_R \leq 100V$	$\geq 3750M\Omega$, $C_N \leq 0.33\mu F$ $\geq 1250s$, $C_N > 0.33\mu F$	$U_R < 100V$, charge voltage is 10V $U_R \geq 100V$, charge voltage is 100V (20°C, 1min)		
	$U_R > 100V$	$\geq 7500M\Omega$, $C_N \leq 0.33\mu F$ $\geq 2500s$, $C_N > 0.33\mu F$			
Maximum Pulse Rise Time(dV/dt) If the working voltage(U) is lower than the rated voltage(U_R),the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the right value with U_R/U .	U_R (V)	dV/dt (V/ μ s)			
		P=5.0	P=7.5	P=10.0	P=15.0
	63	120	120	--	--
	100	150	150	75	50
	250	250	200	150	100
	400	300	275	175	125
	630	400	320	--	150
1 000	600	400	--	--	



Storage Condition	Temperature: not exceeding 35 °C Humidity: not exceeding 75% RH Storage time: 6 months. If exceed 6 months, please dry for 24 hours at 70±5°C
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■ Part number system

The 15 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	2	5												

Digit 1 to 3 Series code

C25=CL25

Digit 4 to 5 DC rated voltage

1J=63V 2A=100V 2E=250V

2G=400V 2J=630V 3A=1000V

Digit 6 to 8 Rated capacitance value

For example : 103=10×10³pF=0.01uF

Digit 9 Capacitance tolerance

J=±5%,K=±10%, M=±20%

Digit 10 Lead pitch

2=5.0mm 3=7.5mm 4=10.0mm 6=15.0mm

Digit 11 Internal use

Digit 12 to 15 Lead form and packaging code

Table 1 lead dimensions and packaging code

Digit 12		Digit 13		Digit 14		Digit 15	
code	explanation	code	explanation	code	explanation	code	explanation
A	ammo-pack	2	F=5.0mm	0	straight	1	each cap. among two consecutive holes P3=12.7mm,H=18.5mm (For pitch=5.0/7.5mm)
		3	F=7.5mm				
		4	F=10.0mm			5	each cap. among two consecutive holes P3=25.4mm, H=18.5mm (For pitch=10.0/15mm)
		6	F=15.0mm				
C	straight lead "C" in the figure above	code	explanation	0		0	Length tolerance ±0.5mm Or standard length
		00	standard lead length (18mm~22mm)				
		45	lead length 4.5mm				

Note: Recommend short lead due to long lead could deform easily.



■ Dimensions (mm)

63Vdc(40Vac)							63Vdc(40Vac)							63Vdc(40Vac)						
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number
0.0010	6.5	3.9	2.0	5.0	0.5	C251J102-20****	0.039	6.5	4.7	2.7	5.0	0.5	C251J393-20****	0.22	9.0	4.0	2.4	7.5	0.5	C251J224-30****
0.0012	6.5	4.0	2.2	5.0	0.5	C251J122-20****	0.047	6.5	4.0	2.0	5.0	0.5	C251J473-20****	0.27	9.0	4.6	2.5	7.5	0.5	C251J274-30****
0.0015	6.5	5.0	2.2	5.0	0.5	C251J152-20****	0.056	6.5	4.1	2.2	5.0	0.5	C251J563-20****	0.33	9.0	5.1	2.7	7.5	0.5	C251J334-30****
0.0018	6.5	4.9	2.5	5.0	0.5	C251J182-20****	0.068	6.5	4.1	2.5	5.0	0.5	C251J683-20****	0.39	9.0	5.9	2.7	7.5	0.5	C251J394-30****
0.0022	6.5	4.7	2.2	5.0	0.5	C251J222-20****	0.082	6.5	4.4	2.7	5.0	0.5	C251J823-20****	0.47	9.0	5.2	2.7	7.5	0.5	C251J474-30****
0.0027	6.5	4.7	2.5	5.0	0.5	C251J272-20****	0.10	6.5	3.8	2.0	5.0	0.5	C251J104-20****	0.56	9.0	6.2	2.7	7.5	0.5	C251J564-30****
0.0033	6.5	5.2	2.7	5.0	0.5	C251J332-20****	0.12	6.5	3.9	2.2	5.0	0.5	C251J124-20****	0.68	9.0	5.9	3.2	7.5	0.5	C251J684-30****
0.0039	6.5	3.8	2.0	5.0	0.5	C251J392-20****	0.15	6.5	4.8	2.2	5.0	0.5	C251J154-20****	0.82	9.0	5.9	3.7	7.5	0.5	C251J824-30****
0.0047	6.5	3.9	2.2	5.0	0.5	C251J472-20****	0.18	6.5	4.9	2.4	5.0	0.5	C251J184-20****	1.0	9.0	6.2	4.2	7.5	0.5	C251J105-30****
0.0056	6.5	4.6	2.2	5.0	0.5	C251J562-20****	0.22	6.5	4.2	2.5	5.0	0.5	C251J224-20****	1.2	9.0	6.4	4.8	7.5	0.5	C251J125-30****
0.0068	6.5	4.6	2.5	5.0	0.5	C251J682-20****	0.27	6.5	4.6	2.7	5.0	0.5	C251J274-20****	1.5	9.0	7.1	5.4	7.5	0.5	C251J155-30****
0.0082	6.5	5.0	2.7	5.0	0.5	C251J822-20****	0.33	6.5	5.1	2.9	5.0	0.5	C251J334-20****	1.8	9.0	7.6	5.7	7.5	0.5	C251J185-30****
0.010	6.5	3.7	2.0	5.0	0.5	C251J103-20****	0.39	6.5	5.2	3.2	5.0	0.5	C251J394-20****	2.2	9.0	8.5	6.3	7.5	0.5	C251J225-30****
0.012	6.5	4.1	2.0	5.0	0.5	C251J123-20****	0.47	6.5	5.2	3.7	5.0	0.5	C251J474-20****	2.7	9.0	9.6	6.7	7.5	0.5	C251J275-30****
0.015	6.5	3.6	2.5	5.0	0.5	C251J153-20****	0.56	6.5	7.4	3.2	5.0	0.5	C251J564-20****	3.3	9.0	11.2	7.3	7.5	0.5	C251J335-30****
0.018	6.5	4.3	2.5	5.0	0.5	C251J183-20****	0.68	6.5	7.5	3.7	5.0	0.5	C251J684-20****	3.9	9.0	11.3	8.3	7.5	0.5	C251J395-30****
0.022	6.5	4.2	2.0	5.0	0.5	C251J223-20****	0.82	6.5	7.7	4.2	5.0	0.5	C251J824-20****	4.7	9.0	11.8	9.3	7.5	0.5	C251J475-30****
0.027	6.5	4.4	2.2	5.0	0.5	C251J273-20****	1.0	6.5	8.4	4.7	5.0	0.5	C251J105-20****	5.6	9.0	13.0	10.2	7.5	0.5	C251J565-30****
0.033	6.5	4.4	2.5	5.0	0.5	C251J333-20****								6.8	9.0	13.5	11.7	7.5	0.5	C251J685-30****

100Vdc(63Vac)							100Vdc(63Vac)							100Vdc(63Vac)						
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number
0.0010	6.5	3.9	2.0	5.0	0.5	C252A102-20****	0.18	6.5	4.9	2.4	5.0	0.5	C252A184-20****	0.33	11.5	4.0	2.5	10.0	0.5	C252A334-40****
0.0012	6.5	4.0	2.2	5.0	0.5	C252A122-20****	0.22	6.5	4.7	2.9	5.0	0.5	C252A224-20****	0.39	11.5	4.7	2.5	10.0	0.5	C252A394-40****
0.0015	6.5	5.0	2.2	5.0	0.5	C252A152-20****	0.27	6.5	5.0	3.2	5.0	0.5	C252A274-20****	0.47	11.5	5.0	2.7	10.0	0.5	C252A474-40****
0.0018	6.5	4.9	2.5	5.0	0.5	C252A182-20****	0.33	6.5	5.1	3.7	5.0	0.5	C252A334-20****	0.56	11.5	4.7	3.2	10.0	0.5	C252A564-40****
0.0022	6.5	4.7	2.2	5.0	0.5	C252A222-20****	0.39	6.5	7.2	3.2	5.0	0.5	C252A394-20****	0.68	11.5	5.7	3.2	10.0	0.5	C252A684-40****
0.0027	6.5	4.7	2.5	5.0	0.5	C252A272-20****	0.47	6.5	7.2	3.7	5.0	0.5	C252A474-20****	0.82	11.5	5.7	3.7	10.0	0.5	C252A824-40****
0.0033	6.5	5.2	2.7	5.0	0.5	C252A332-20****	0.56	6.5	7.3	4.2	5.0	0.5	C252A564-20****	1.0	11.5	5.9	4.2	10.0	0.5	C252A105-40****
0.0039	6.5	3.8	2.0	5.0	0.5	C252A392-20****	0.68	6.5	7.9	4.7	5.0	0.5	C252A684-20****	1.2	11.5	7.1	4.2	10.0	0.5	C252A125-40****
0.0047	6.5	3.9	2.2	5.0	0.5	C252A472-20****	0.82	6.5	8.2	5.3	5.0	0.5	C252A824-20****	1.5	11.5	7.7	4.7	10.0	0.5	C252A155-40****
0.0056	6.5	4.6	2.2	5.0	0.5	C252A562-20****	1.0	6.5	8.5	5.7	5.0	0.5	C252A105-20****	1.8	11.5	8.3	5.2	10.0	0.5	C252A185-40****
0.0068	6.5	4.6	2.5	5.0	0.5	C252A682-20****	0.10	9.0	4.1	2.4	7.5	0.5	C252A104-30****	2.2	11.5	9.1	5.7	10.0	0.5	C252A225-40****
0.0082	6.5	5.0	2.7	5.0	0.5	C252A822-20****	0.12	9.0	4.2	2.7	7.5	0.5	C252A124-30****	1.0	16.5	6.1	3.2	15.0	0.6	C252A105-60****
0.010	6.5	3.7	2.0	5.0	0.5	C252A103-20****	0.15	9.0	5.2	2.7	7.5	0.5	C252A154-30****	1.2	16.5	5.9	3.7	15.0	0.6	C252A125-60****
0.012	6.5	4.1	2.0	5.0	0.5	C252A123-20****	0.18	9.0	3.8	2.2	7.5	0.5	C252A184-30****	1.5	16.5	6.6	4.2	15.0	0.6	C252A155-60****
0.015	6.5	3.6	2.5	5.0	0.5	C252A153-20****	0.22	9.0	4.0	2.4	7.5	0.5	C252A224-30****	1.8	16.5	7.5	4.4	15.0	0.6	C252A185-60****
0.018	6.5	4.3	2.5	5.0	0.5	C252A183-20****	0.27	9.0	4.2	2.7	7.5	0.5	C252A274-30****	2.2	16.5	7.5	5.2	15.0	0.6	C252A225-60****
0.022	6.5	4.2	2.0	5.0	0.5	C252A223-20****	0.33	9.0	5.1	2.7	7.5	0.5	C252A334-30****	2.7	16.5	8.5	5.5	15.0	0.6	C252A275-60****
0.027	6.5	4.4	2.2	5.0	0.5	C252A273-20****	0.39	9.0	5.9	2.7	7.5	0.5	C252A394-30****	3.3	16.5	9.3	6.0	15.0	0.6	C252A335-60****
0.033	6.5	4.4	2.5	5.0	0.5	C252A333-20****	0.47	9.0	5.7	3.2	7.5	0.5	C252A474-30****	3.9	16.5	10.5	6.2	15.0	0.6	C252A395-60****
0.039	6.5	4.7	2.7	5.0	0.5	C252A393-20****	0.56	9.0	5.6	3.7	7.5	0.5	C252A564-30****	4.7	16.5	10.8	7.0	15.0	0.6	C252A475-60****
0.047	6.5	4.0	2.0	5.0	0.5	C252A473-20****	0.68	9.0	5.8	4.2	7.5	0.5	C252A684-30****	5.6	16.5	11.9	7.6	15.0	0.6	C252A565-60****
0.056	6.5	4.1	2.2	5.0	0.5	C252A563-20****	0.82	9.0	7.0	4.2	7.5	0.5	C252A824-30****	6.8	16.5	12.4	8.7	15.0	0.6	C252A685-60****
0.068	6.5	4.1	2.5	5.0	0.5	C252A683-20****	1.0	9.0	7.4	4.7	7.5	0.5	C252A105-30****	8.2	16.5	13.1	9.7	15.0	0.6	C252A825-60****
0.082	6.5	4.4	2.7	5.0	0.5	C252A823-20****	1.2	9.0	7.4	5.5	7.5	0.5	C252A125-30****	10.0	16.5	14.5	10.6	15.0	0.6	C252A106-60****
0.10	6.5	3.8	2.0	5.0	0.5	C252A104-20****	1.5	9.0	8.0	6.3	7.5	0.5	C252A155-30****							
0.12	6.5	3.9	2.2	5.0	0.5	C252A124-20****	1.8	9.0	9.7	6.2	7.5	0.5	C252A185-30****							
0.15	6.5	4.8	2.2	5.0	0.5	C252A154-20****	2.2	9.0	10.3	7.2	7.5	0.5	C252A225-30****							

Note: 1. “-” =capacitance tolerance code, M=±20%,K=±10%,J=±5%
 2. “****” =lead form and packaging code (refer to table 1).



■ Dimensions (mm)

250Vdc(160Vac)							250Vdc(160Vac)							250Vdc(160Vac)						
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number
0.0010	6.5	3.9	2.0	5.0	0.5	C252E102-20****	0.082	6.5	4.7	3.5	5.0	0.5	C252E823-20****	0.15	11.5	6.4	3.2	10.0	0.5	C252E154-40****
0.0012	6.5	4.0	2.2	5.0	0.5	C252E122-20****	0.10	6.5	5.3	3.7	5.0	0.5	C252E104-20****	0.18	11.5	5.2	3.2	10.0	0.5	C252E184-40****
0.0015	6.5	5.0	2.2	5.0	0.5	C252E152-20****	0.12	6.5	6.7	3.5	5.0	0.5	C252E124-20****	0.22	11.5	5.3	3.7	10.0	0.5	C252E224-40****
0.0018	6.5	4.9	2.5	5.0	0.5	C252E182-20****	0.15	6.5	6.7	4.2	5.0	0.5	C252E154-20****	0.27	11.5	5.5	4.2	10.0	0.5	C252E274-40****
0.0022	6.5	4.7	2.2	5.0	0.5	C252E222-20****	0.033	9.0	3.5	2.2	7.5	0.5	C252E333-30****	0.33	11.5	6.1	4.5	10.0	0.5	C252E334-40****
0.0027	6.5	4.7	2.5	5.0	0.5	C252E272-20****	0.039	9.0	4.1	2.2	7.5	0.5	C252E393-30****	0.39	11.5	6.5	4.9	10.0	0.5	C252E394-40****
0.0033	6.5	5.2	2.7	5.0	0.5	C252E332-20****	0.047	9.0	4.1	2.5	7.5	0.5	C252E473-30****	0.47	11.5	7.5	5.2	10.0	0.5	C252E474-40****
0.0039	6.5	3.8	2.0	5.0	0.5	C252E392-20****	0.056	9.0	4.4	2.7	7.5	0.5	C252E563-30****	0.22	16.5	4.6	3.2	15.0	0.6	C252E224-60****
0.0047	6.5	3.9	2.2	5.0	0.5	C252E472-20****	0.068	9.0	5.3	2.7	7.5	0.5	C252E683-30****	0.27	16.5	5.6	3.2	15.0	0.6	C252E274-60****
0.0056	6.5	4.6	2.2	5.0	0.5	C252E562-20****	0.082	9.0	4.3	2.7	7.5	0.5	C252E823-30****	0.33	16.5	5.6	3.7	15.0	0.6	C252E334-60****
0.0068	6.5	4.6	2.5	5.0	0.5	C252E682-20****	0.10	9.0	4.6	3.0	7.5	0.5	C252E104-30****	0.39	16.5	6.6	3.7	15.0	0.6	C252E394-60****
0.0082	6.5	5.0	2.7	5.0	0.5	C252E822-20****	0.12	9.0	5.0	3.2	7.5	0.5	C252E124-30****	0.47	16.5	6.7	4.2	15.0	0.6	C252E474-60****
0.010	6.5	3.7	2.0	5.0	0.5	C252E103-20****	0.15	9.0	5.2	3.7	7.5	0.5	C252E154-30****	0.56	16.5	6.8	4.7	15.0	0.6	C252E564-60****
0.012	6.5	4.1	2.0	5.0	0.5	C252E123-20****	0.18	9.0	5.8	3.9	7.5	0.5	C252E184-30****	0.68	16.5	7.3	5.5	15.0	0.6	C252E684-60****
0.015	6.5	3.6	2.5	5.0	0.5	C252E153-20****	0.22	9.0	6.4	4.2	7.5	0.5	C252E224-30****	0.82	16.5	8.8	5.5	15.0	0.6	C252E824-60****
0.018	6.5	4.3	2.5	5.0	0.5	C252E183-20****	0.27	9.0	6.8	4.7	7.5	0.5	C252E274-30****	1.0	16.5	9.6	6.0	15.0	0.6	C252E105-60****
0.022	6.5	4.2	2.0	5.0	0.5	C252E223-20****	0.33	9.0	6.9	5.5	7.5	0.5	C252E334-30****	1.2	16.5	10.0	6.7	15.0	0.6	C252E125-60****
0.027	6.5	4.4	2.2	5.0	0.5	C252E273-20****	0.047	11.5	3.8	2.2	10.0	0.5	C252E473-40****	1.5	16.5	11.8	7.0	15.0	0.6	C252E155-60****
0.033	6.5	4.4	2.5	5.0	0.5	C252E333-20****	0.056	11.5	4.1	2.2	10.0	0.5	C252E563-40****	1.8	16.5	13.1	7.5	15.0	0.6	C252E185-60****
0.039	6.5	4.7	2.7	5.0	0.5	C252E393-20****	0.068	11.5	4.1	2.5	10.0	0.5	C252E683-40****	2.2	16.5	12.8	9.0	15.0	0.6	C252E225-60****
0.047	6.5	3.8	2.7	5.0	0.5	C252E473-20****	0.082	11.5	4.4	2.7	10.0	0.5	C252E823-40****	2.7	16.5	13.9	10.2	15.0	0.6	C252E275-60****
0.056	6.5	4.1	2.9	5.0	0.5	C252E563-20****	0.10	11.5	5.4	2.7	10.0	0.5	C252E104-40****	3.3	16.5	15.3	11.2	15.0	0.6	C252E335-60****

400Vdc (200Vac)							400Vdc (200Vac)							400Vdc (200Vac)						
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number
0.0010	6.5	3.9	2.0	5.0	0.5	C252G102-20****	0.0022	9.0	3.7	2.2	7.5	0.5	C252G222-30****	0.033	11.5	4.3	2.2	10.0	0.5	C252G333-40****
0.0012	6.5	4.0	2.2	5.0	0.5	C252G122-20****	0.0027	9.0	4.6	2.2	7.5	0.5	C252G272-30****	0.039	11.5	4.2	2.5	10.0	0.5	C252G393-40****
0.0015	6.5	5.0	2.2	5.0	0.5	C252G152-20****	0.0033	9.0	3.8	2.2	7.5	0.5	C252G332-30****	0.047	11.5	4.5	2.7	10.0	0.5	C252G473-40****
0.0018	6.5	4.9	2.5	5.0	0.5	C252G182-20****	0.0039	9.0	3.9	2.2	7.5	0.5	C252G392-30****	0.056	11.5	5.4	2.7	10.0	0.5	C252G563-40****
0.0022	6.5	4.7	2.2	5.0	0.5	C252G222-20****	0.0047	9.0	4.7	2.2	7.5	0.5	C252G472-30****	0.068	11.5	5.2	3.2	10.0	0.5	C252G683-40****
0.0027	6.5	4.7	2.5	5.0	0.5	C252G272-20****	0.0056	9.0	3.7	2.2	7.5	0.5	C252G562-30****	0.082	11.5	6.2	3.2	10.0	0.5	C252G823-40****
0.0033	6.5	5.2	2.7	5.0	0.5	C252G332-20****	0.0068	9.0	4.5	2.2	7.5	0.5	C252G682-30****	0.10	11.5	6.2	3.7	10.0	0.5	C252G104-40****
0.0039	6.5	3.8	2.0	5.0	0.5	C252G392-20****	0.0082	9.0	4.5	2.5	7.5	0.5	C252G822-30****	0.12	11.5	6.4	4.2	10.0	0.5	C252G124-40****
0.0047	6.5	3.9	2.2	5.0	0.5	C252G472-20****	0.010	9.0	4.0	2.2	7.5	0.5	C252G103-30****	0.15	11.5	6.9	4.7	10.0	0.5	C252G154-40****
0.0056	6.5	4.6	2.2	5.0	0.5	C252G562-20****	0.012	9.0	4.4	2.2	7.5	0.5	C252G123-30****	0.18	11.5	7.5	5.2	10.0	0.5	C252G184-40****
0.0068	6.5	4.6	2.5	5.0	0.5	C252G682-20****	0.015	9.0	4.5	2.5	7.5	0.5	C252G153-30****	0.22	11.5	8.2	5.7	10.0	0.5	C252G224-40****
0.0082	6.5	5.0	2.7	5.0	0.5	C252G822-20****	0.018	9.0	3.7	2.2	7.5	0.5	C252G183-30****	0.047	16.5	4.1	2.4	15.0	0.6	C252G473-60****
0.010	6.5	3.7	2.0	5.0	0.5	C252G103-20****	0.022	9.0	4.2	2.2	7.5	0.5	C252G223-30****	0.056	16.5	4.0	2.7	15.0	0.6	C252G563-60****
0.012	6.5	4.1	2.0	5.0	0.5	C252G123-20****	0.027	9.0	4.2	2.5	7.5	0.5	C252G273-30****	0.068	16.5	4.3	2.9	15.0	0.6	C252G683-60****
0.015	6.5	4.3	2.2	5.0	0.5	C252G153-20****	0.033	9.0	4.6	2.7	7.5	0.5	C252G333-30****	0.082	16.5	4.5	3.2	15.0	0.6	C252G823-60****
0.018	6.5	4.3	2.5	5.0	0.5	C252G183-20****	0.039	9.0	5.4	2.7	7.5	0.5	C252G393-30****	0.10	16.5	5.5	3.2	15.0	0.6	C252G104-60****
0.022	6.5	4.7	2.7	5.0	0.5	C252G223-20****	0.047	9.0	6.1	2.8	7.5	0.5	C252G473-30****	0.12	16.5	5.3	3.7	15.0	0.6	C252G124-60****
0.027	6.5	5.2	2.9	5.0	0.5	C252G273-20****	0.056	9.0	6.1	3.2	7.5	0.5	C252G563-30****	0.15	16.5	6.2	3.9	15.0	0.6	C252G154-60****
0.033	6.5	5.5	3.2	5.0	0.5	C252G333-20****	0.068	9.0	6.1	3.7	7.5	0.5	C252G683-30****	0.18	16.5	6.7	4.2	15.0	0.6	C252G184-60****
0.039	6.5	5.4	3.7	5.0	0.5	C252G393-20****	0.082	9.0	6.3	4.2	7.5	0.5	C252G823-30****	0.22	16.5	7.1	4.7	15.0	0.6	C252G224-60****
0.047	6.5	6.9	3.5	5.0	0.5	C252G473-20****	0.10	9.0	7.2	4.4	7.5	0.5	C252G104-30****	0.27	16.5	7.6	5.5	15.0	0.6	C252G274-60****
0.056	6.5	7.7	3.7	5.0	0.5	C252G563-20****	0.12	9.0	7.1	5.2	7.5	0.5	C252G124-30****	0.33	16.5	8.5	5.9	15.0	0.6	C252G334-60****
0.068	6.5	7.9	4.2	5.0	0.5	C252G683-20****	0.15	9.0	7.9	5.7	7.5	0.5	C252G154-30****	0.39	16.5	9.4	6.2	15.0	0.6	C252G394-60****
0.082	6.5	8.6	4.7	5.0	0.5	C252G823-20****	0.010	11.5	3.9	2.2	10.0	0.5	C252G103-40****	0.47	16.5	9.8	7.0	15.0	0.6	C252G474-60****
0.10	6.5	8.3	5.7	5.0	0.5	C252G104-20****	0.012	11.5	4.4	2.2	10.0	0.5	C252G123-40****	0.56	16.5	10.7	7.5	15.0	0.6	C252G564-60****
0.0010	9.0	3.7	2.0	7.5	0.5	C252G102-30****	0.015	11.5	4.5	2.5	10.0	0.5	C252G153-40****	0.68	16.5	11.2	8.5	15.0	0.6	C252G684-60****
0.0012	9.0	3.7	2.0	7.5	0.5	C252G122-30****	0.018	11.5	4.8	2.7	10.0	0.5	C252G183-40****	0.82	16.5	12.6	9.0	15.0	0.6	C252G824-60****
0.0015	9.0	4.0	2.2	7.5	0.5	C252G152-30****	0.022	11.5	4.6	2.5	10.0	0.5	C252G223-40****	1.0	16.5	13.6	10.2	15.0	0.6	C252G105-60****
0.0018	9.0	4.7	2.2	7.5	0.5	C252G182-30****	0.027	11.5	5.6	2.5	10.0	0.5	C252G273-40****							

Note: 1. “-” =capacitance tolerance code, M=±20%,K=±10%,J=±5%
 2. “****” =lead form and packaging code (refer to table 1).



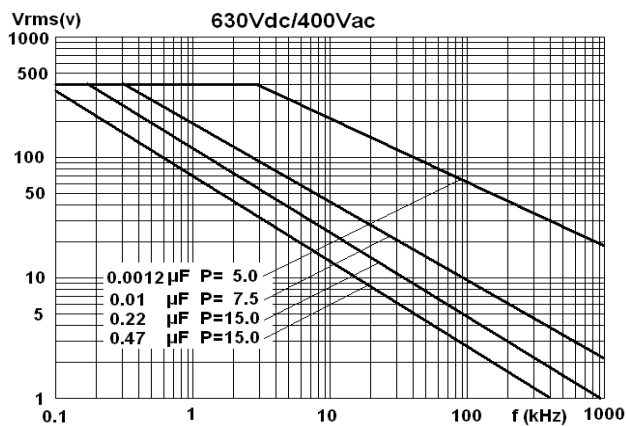
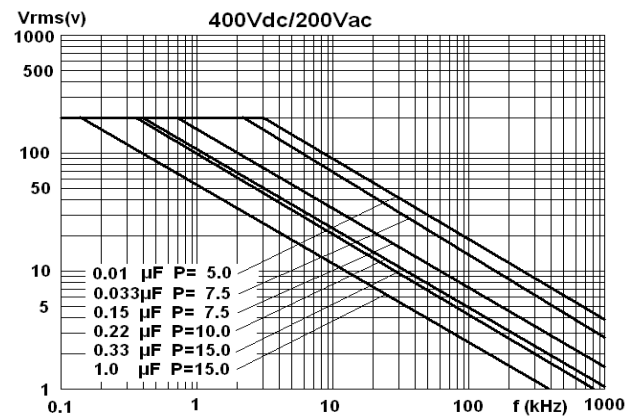
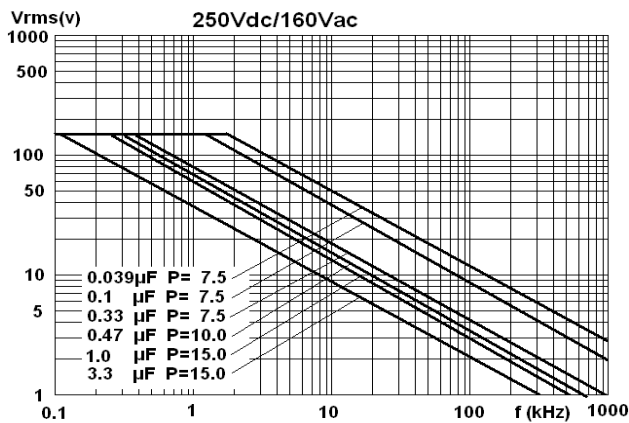
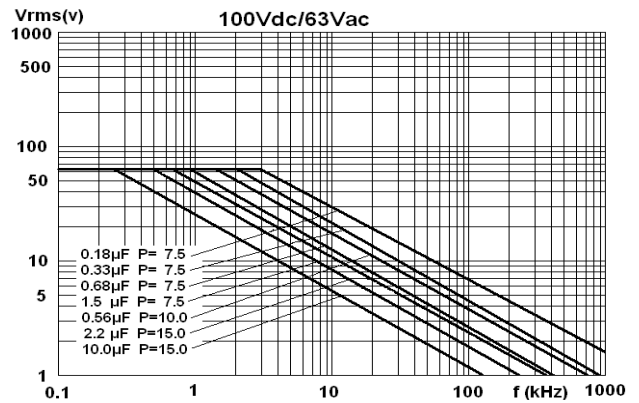
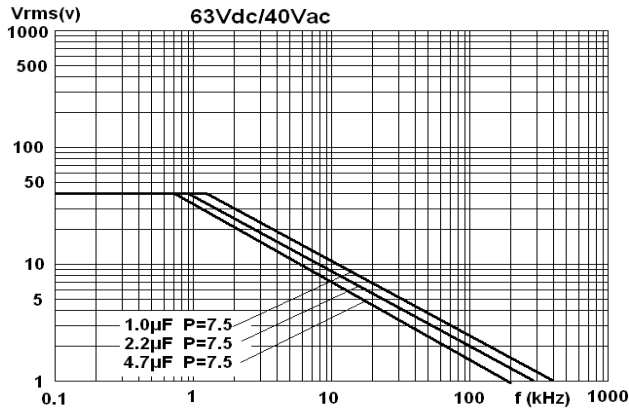
■ Dimensions (mm)

630Vdc(400Vac)							630Vdc(400Vac)							630Vdc(400Vac)							
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	
0.0010	6.5	3.9	2.0	5.0	0.5	C252J102-20****	0.0010	9.0	3.7	2.0	7.5	0.5	C252J102-30****	0.10	16.5	9.2	5.0	15.0	0.6	C252J104-60****	
0.0012	6.5	4.0	2.2	5.0	0.5	C252J122-20****	0.0012	9.0	3.7	2.0	7.5	0.5	C252J122-30****	0.12	16.5	9.8	5.8	15.0	0.6	C252J124-60****	
0.0015	6.5	5.0	2.2	5.0	0.5	C252J152-20****	0.0015	9.0	4.0	2.2	7.5	0.5	C252J152-30****	0.15	16.5	11.2	6.2	15.0	0.6	C252J154-60****	
0.0018	6.5	4.9	2.5	5.0	0.5	C252J182-20****	0.0018	9.0	4.7	2.2	7.5	0.5	C252J182-30****	0.18	16.5	11.2	7.2	15.0	0.6	C252J184-60****	
0.0022	6.5	4.7	2.2	5.0	0.5	C252J222-20****	0.0022	9.0	3.7	2.2	7.5	0.5	C252J222-30****	0.22	16.5	12.5	7.7	15.0	0.6	C252J224-60****	
0.0027	6.5	4.7	2.5	5.0	0.5	C252J272-20****	0.0027	9.0	4.0	2.4	7.5	0.5	C252J272-30****	0.27	16.5	14.3	8.2	15.0	0.6	C252J274-60****	
0.0033	6.5	5.2	2.7	5.0	0.5	C252J332-20****	0.0033	9.0	3.8	2.2	7.5	0.5	C252J332-30****	0.33	16.5	14.4	9.9	15.0	0.6	C252J334-60****	
0.0039	6.5	5.5	2.9	5.0	0.5	C252J392-20****	0.0039	9.0	3.9	2.2	7.5	0.5	C252J392-30****	0.39	16.5	15.2	10.9	15.0	0.6	C252J394-60****	
0.0047	6.5	4.9	2.5	5.0	0.5	C252J472-20****	0.0047	9.0	4.1	2.4	7.5	0.5	C252J472-30****	0.47	16.5	17.5	11.3	15.0	0.6	C252J474-60****	
0.0056	6.5	5.2	2.7	5.0	0.5	C252J562-20****	0.0056	9.0	4.6	2.5	7.5	0.5	C252J562-30****								
0.0068	6.5	5.0	3.2	5.0	0.5	C252J682-20****	0.0068	9.0	5.0	2.7	7.5	0.5	C252J682-30****								
0.0082	6.5	5.4	3.5	5.0	0.5	C252J822-20****	0.0082	9.0	6.1	2.7	7.5	0.5	C252J822-30****								
0.010	6.5	5.7	3.9	5.0	0.5	C252J103-20****	0.010	9.0	6.2	3.2	7.5	0.5	C252J103-30****								
0.012	6.5	7.3	3.7	5.0	0.5	C252J123-20****	0.012	9.0	5.8	3.7	7.5	0.5	C252J123-30****								
							0.015	9.0	6.2	4.2	7.5	0.5	C252J153-30****								
							0.018	9.0	7.4	4.2	7.5	0.5	C252J183-30****								
							0.022	9.0	7.9	4.7	7.5	0.5	C252J223-30****								
							0.027	9.0	7.8	5.7	7.5	0.5	C252J273-30****								
							0.033	9.0	9.5	5.7	7.5	0.5	C252J333-30****								
							0.039	9.0	10.2	6.3	7.5	0.5	C252J393-30****								
							0.047	9.0	11.2	6.8	7.5	0.5	C252J473-30****								

1 000Vdc(600Vac)							1 000Vdc(600Vac)							1 000Vdc(600Vac)							
C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	C _N (μF)	W max	H max	T max	P	d	Part number	
0.0010	6.5	3.9	2.0	5.0	0.5	C253A102-20****	0.0010	9.0	3.7	2.0	7.5	0.5	C253A102-30****	0.012	9.0	7.3	4.7	7.5	0.5	C253A123-30****	
0.0012	6.5	4.0	2.2	5.0	0.5	C253A122-20****	0.0012	9.0	3.7	2.0	7.5	0.5	C253A122-30****	0.015	9.0	8.1	5.2	7.5	0.5	C253A153-30****	
0.0015	6.5	5.0	2.2	5.0	0.5	C253A152-20****	0.0015	9.0	4.0	2.2	7.5	0.5	C253A152-30****	0.018	9.0	9.7	5.2	7.5	0.5	C253A183-30****	
0.0018	6.5	4.9	2.5	5.0	0.5	C253A182-20****	0.0018	9.0	4.7	2.2	7.5	0.5	C253A182-30****	0.022	9.0	10.6	5.7	7.5	0.5	C253A223-30****	
0.0022	6.5	4.7	2.2	5.0	0.5	C253A222-20****	0.0022	9.0	3.7	2.2	7.5	0.5	C253A222-30****	0.027	9.0	11.8	6.3	7.5	0.5	C253A273-30****	
0.0027	6.5	4.7	2.5	5.0	0.5	C253A272-20****	0.0027	9.0	4.6	2.2	7.5	0.5	C253A272-30****	0.033	9.0	13.2	6.8	7.5	0.5	C253A333-30****	
0.0033	6.5	5.2	2.7	5.0	0.5	C253A332-20****	0.0033	9.0	4.6	2.5	7.5	0.5	C253A332-30****								
0.0039	6.5	5.5	2.9	5.0	0.5	C253A392-20****	0.0039	9.0	4.9	2.7	7.5	0.5	C253A392-30****								
0.0047	6.5	5.8	3.2	5.0	0.5	C253A472-20****	0.0047	9.0	5.8	2.7	7.5	0.5	C253A472-30****								
0.0056	6.5	5.8	3.7	5.0	0.5	C253A562-20****	0.0056	9.0	5.5	3.2	7.5	0.5	C253A562-30****								
0.0068	6.5	8.4	3.2	5.0	0.5	C253A682-20****	0.0068	9.0	6.7	3.2	7.5	0.5	C253A682-30****								
0.0082	6.5	8.4	3.7	5.0	0.5	C253A822-20****	0.0082	9.0	6.7	3.7	7.5	0.5	C253A822-30****								
0.010	6.5	8.8	4.2	5.0	0.5	C253A103-20****	0.010	9.0	7.0	4.2	7.5	0.5	C253A103-30****								

Note: 1. "-" =capacitance tolerance code, M=±20%,K=±10%,J=±5%
 2. "****" =lead form and packaging code (refer to table 1).

■ MAX. VOLTAGE(Vr.m.s) VERSUS FREQUENCY



Note: sinusoidal wave-form、environment temperature $\leq 85^{\circ}\text{C}$, internal temperature rise $\Delta T=15^{\circ}\text{C}$, p (pitch) in mm.

■ Test Method And Performance

No.	Item	Performance	Test method (GB/T 7332(IEC 60384-2))
1	Solderability	Good quality of tinning	Solder temperature:245°C±5°C Immersion time: 2.0s±0.5s
2	Initial measurement	Capacitance, Tanδ	
	Terminal strength (straight lead)	There shall be no visible damage	Tension Ua1: Pull: φd=0.5mm,5N φd≥0.6mm, 10N Bend Ub: The pull of bend: φd=0.5mm, 2.5N φd≥0.6mm, 5N The terminals shall be bent 2 times in each direction.
	Resistance to solder heat	There shall be no visible damage, legible marking	Solder temperature:260°C±5°C Immersion time: 10s±1s
	Final measurement	ΔC/C ≤ ±2%(relative to the initial value) Increase of tanδ: ≤0.003 (C≤1.0μF) ≤0.002 (C>1.0μF)	
3	Initial measurement	Capacitance, Tanδ	
	Rapid change of temperature	There shall be no evidence of deterioration.	θ _A =-55°C, θ _B =+125°C 5 cycles Duration: t=30min
	Vibration(straight lead)	There shall be no evidence of deterioration.	Amplitude 0.75mm or acceleration 98m/s ² (whichever is the smaller severity), f: 10Hz to 500Hz.Three directions, 2h for each direction, total 6h.
	Bump(straight lead)	There shall be no evidence of deterioration.	4 000 times, Acceleration: 390m/s ² ,Pulse duration, 6ms
	Final measurement	ΔC/C ≤±5%(relative to the initial value) Increase of tanδ: ≤0.003 (C≤1.0μF) ≤0.002 (C>1.0μF) IR: ≥ 50% of the rated value	
4	climate sequence	Initial measurement	Capacitance, Tanδ
		Dry heat	+125°C, 16h
		Damp heat, Cyclic	Test Db, Severity: b, the first cycle
		Cold	-55°C, 2h
		Low air pressure	There shall be no permanent breakdown, flashover or other harmful deformation when applying U _R at the last 1 minute. 15°C~ 35°C, 8.5kPa, 1h,
		Damp heat, cyclic other	Test Db, Severity b, the other cycles, Applying U _R for 1 minute after the test finished.
		Final measurement	There shall be no evidence of deterioration and the marking shall be legible. ΔC/C≤ ±5%(relative to the initial value) Increase of tanδ: ≤0.005 (C≤1.0μF) ≤0.003 (C>1.0μF) IR: ≥50% of the rated value



No.	Item	Performance	Test method (GB 7332(IEC 60384-2))
5	Damp heat steady state	There shall be no evidence of deterioration and the marking shall be legible. $\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\tan \delta \leq 0.005$ IR: $\geq 50\%$ of the rated value	Temperature: $40^\circ\text{C} \pm 2^\circ\text{C}$ Humidity: $93 \pm 2_{-3} \% \text{RH}$ Duration: 56 days
6	Endurance	There shall be no evidence of deterioration and the marking shall be legible. $\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\tan \delta$: $C \leq 1.0\mu\text{F}, \leq 0.003$; $C > 1.0\mu\text{F}, \leq 0.002$ IR: $\geq 50\%$ of the rated value	$+85^\circ\text{C}, 1.25 \times U_R$ 1 000h or $+125^\circ\text{C}, 1.25 \times U_c$ ($U_c = 0.5U_R$) 1 000h
7	Temperature characteristic	Measuring capacitance at test point b, d, f: Characteristic at lower category temperature -55°C : $-10\% \leq (C_b - C_d)/C_d \leq 0\%$ Characteristic at upper category temperature $+125^\circ\text{C}$: $0\% \leq (C_f - C_d)/C_d \leq +18\%$ I.R. (test at point f): $U_R \leq 100\text{V}$: $\geq 75 \text{ M}\Omega$ ($C \leq 0.33\mu\text{F}$) $\geq 25\text{s}$ ($C > 0.33\mu\text{F}$) $U_R > 100\text{V}$: $\geq 150 \text{ M}\Omega$ ($C \leq 0.33\mu\text{F}$) $\geq 50\text{s}$ ($C > 0.33\mu\text{F}$)	Static method: The Capacitors should be kept at the following temperature in turn: a(20 ± 2) $^\circ\text{C}$, b(-55 ± 3) $^\circ\text{C}$, d(20 ± 2) $^\circ\text{C}$, f(125 ± 2) $^\circ\text{C}$, g(20 ± 2) $^\circ\text{C}$
8	Charging and discharging	$\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\tan \delta$: ≤ 0.003 ($C \leq 1.0\mu\text{F}$) ≤ 0.002 ($C > 1.0\mu\text{F}$) IR: $\geq 50\%$ of the rated value	Ref.item 4.13 Times: 10 000 Duration of charging: 0.5s Duration of discharging: 0.5s Charging voltage: rated voltage Charging resistance: $220/C_N(\Omega)$ or current intensity $\leq 1\text{A}$ (whichever is the less current intensity) Discharging resistance: $R = U_R / (10 \times C_N \times dV/dt)$ C_N : rated capacitance (μF)

■ Marking (For example)

104K
100

Marking Introduction:

100	Rated voltage	104	Rated capacitance
K	Tolerance	-	-

■ Taping specification

1. **Taping Dimensions:** Refer to table 2
2. **Outline Drawing:** Refer to Fig 1 ~ Fig 3

Table 2 Taping Dimensions

Unit: mm

Specification	Code	Dimensions				Note
		P=7.5		P=10.0	Tolerance	
Code of Ammo Tapped		A301	A211	A402		Digit 12 to 15 of P/N
Taping type	—	Fig 1	Fig 2	Fig3	---	---
Lead dia.	d	0.5		0.5	±0.05	---
Taping pitch	P3	12.7		12.7	±1.0	---
Feed hole pitch	P0	12.7		12.7	±0.3	1mm(max)/20× P0
Center of wire	P1	2.6	3.85	7.7	±0.7	---
Center of body	P2	6.35		12.7	±1.3	---
Pitch	P	7.5		10.0		
Component alignment	△S	0		0	±2.0	---
Pitch of taping wire	F	/	5.0	/	+0.6 -0.1	---
Height of component from tape center	H0	/	16.0	/	±0.5	---
Height of crangle from tape center	H	18.5	20.0	18.5	±0.5	
Carrier tape width	W	18.0		18.0	+1.0 -0.5	---
Hold down tape width	W0	10min		10min	---	---
Hole position	W1	9.0		9.0	±0.5	---
Hold down tape sition	W2	3.0max			---	---
Feed hole dia.	D0	4.0		4.0	±0.2	---
Tape thickness	t	0.7		0.7	±0.2	---

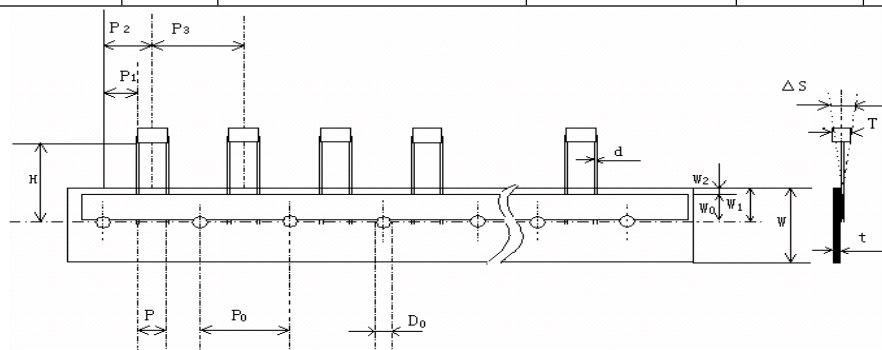


Fig 1

Specification	P=7.5mm
Code of Ammo	A301
Feed hole pitch P0 (mm)	12.7
Pitch of taping wire F(mm)	/
Height of crangle from tape center H(mm)	18.5

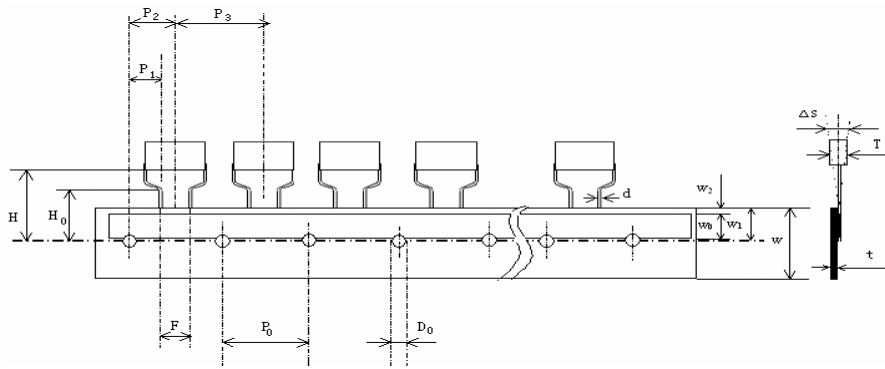


Fig 2

Specification	P=7.5mm
Code of Ammo	A211
Feed hole pitch P0 (mm)	12.7
Pitch of taping wire F(mm)	5.0
Height of crankle from tape center H(mm)	20

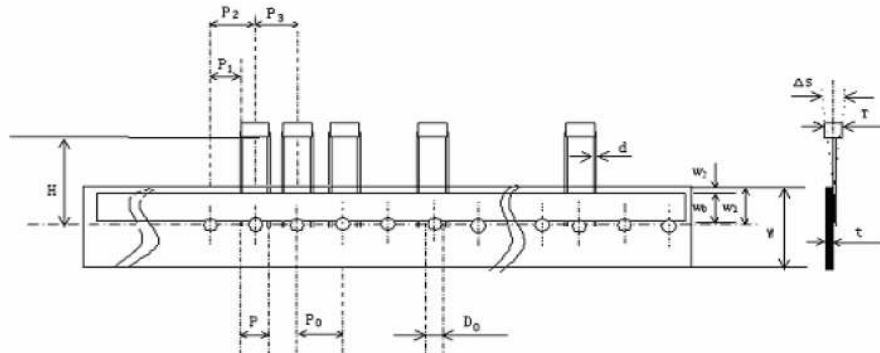


Fig3

Specification	P=10.0mm
Code of Ammo	A402
Feed hole pitch P0 (mm)	12.7
Pitch of taping wire F(mm)	/
Height of crankle from tape center H(mm)	18.5

■ Soldering suggestions

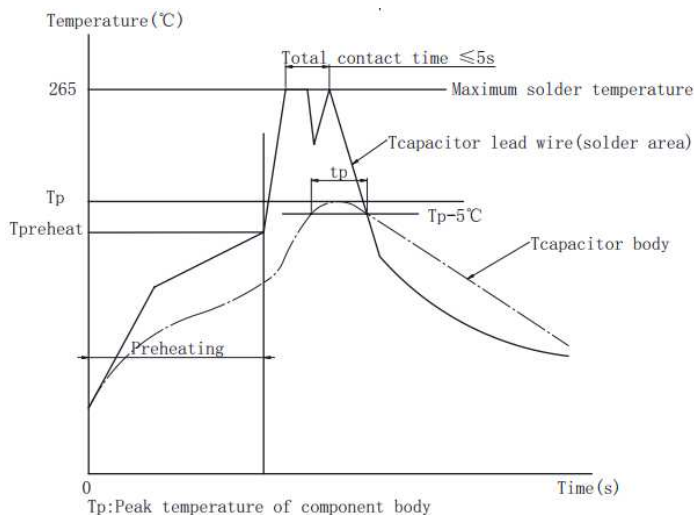
▲ Manual soldering

Max. temperature: 350°C, time: 3s

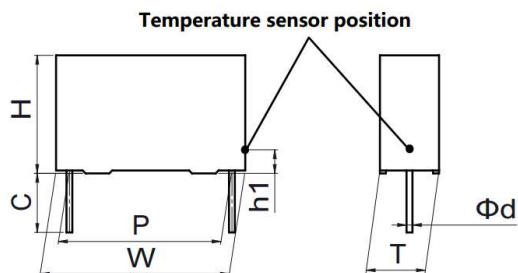
▲ Wave soldering

There are many factors affecting the heating of film capacitor during the wave soldering process, such as: preheating temperature, preheating time, soldering temperature, soldering time, other heat sources influence and so on.

The typical soldering profile is as below:



▲ Because overheating could damage the capacitor, we recommend paying attention to the maximum capacitor temperature and heating time, use temperature sensor to detect the maximum capacitor body temperature.

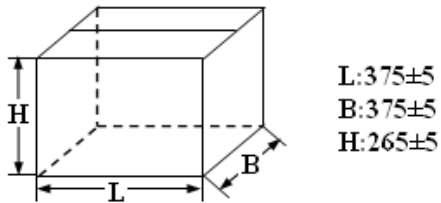


Note: If re-working or dipping twice is necessary, it should be done after the capacitor returns to the normal temperature.

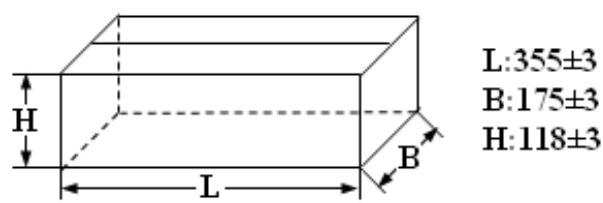
Temperature sensor position (Tcapacitor body)	The capacitor body surface of lead side, capacitor height position from PCB: h1=2~3mm		
Maximum capacitor body temperature Tp(°C)	OPP film P≤15mm	OPP film P>15mm	PET film
	115	120	125
Maximum capacitor lead wire temperature(°C)	265	265	265
Maximum capacitor body heating time tp=Tp-5°C	30s		

■ Packing box sizes(mm)(example)

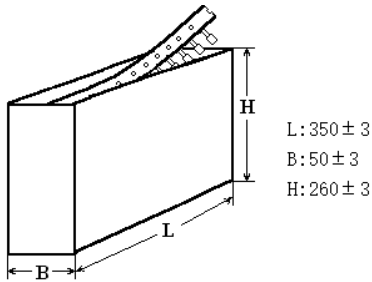
1. Out packing box for bulk



2. Inner packing box for bulk



3. Box sizes for Ammo-pack



■ Storage conditions

▲ It must be noted that the solderability of the terminals may be deteriorated when stored in an atmosphere filled with moisture, dust, or a reactive oxidizing gas.(hydrogen chloride, hydrogen sulfide, sulfuric acid,etc.)

▲ It shouldn't be located in particularly high temperature and high humidity, it must submit to the following conditions(unchanging primal package):

Temperature: -40 °C to 35 °C

Humidity: Average per year ≤70%RH;

For 30 full days randomly distributed throughout the year ≤80%RH

Storage time for tinned lead wire: (from the date marked on the capacitor's body or the label glued to the package) :

Bulk(packed with plastic bag): ≤24 months ;

Taping and line up: ≤12 months