1.Item： CL21

2.Type：MEF

3. Specification：

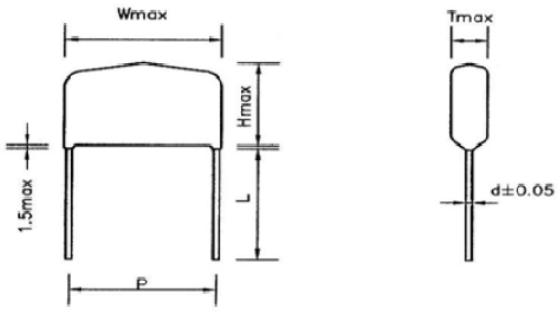
A. Rated Voltage	100V、160V、250V、400V、630V		
B. Capacitance	0.001μF~22.0μF		
C. Capacitance Tolerance	±5% 、±10%		
D. Dissipation factor	one grade ≤0. 008	1KHZ	
	one grade ≤0. 01	1KHZ	
E. Insulation resistance	C≤0. 33μF	UR≤100V	≥15000MΩ
		UR＞100V	≥30000MΩ
	C＞0. 33μF	UR≤100V	≥5000S
		UR＞100V	≥10000S
F. Temperature	-55℃～+85℃		

4. Efficiency Test

<table>
<tr><th>ARTICLE</th><th>APPLICATION ITEM</th><th colspan="4">TEST METHOD</th><th>PERFORMANCE</th></tr>
<tr><td>1</td><td>Appearances</td><td colspan="4">Eye measurement or by dial gauge</td><td>No defect</td></tr>
<tr><td>2</td><td>Withstand voltage</td><td colspan="4">put 1.6UR 2S Between Terminals</td><td>No hole or radian</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">Insulation Resistance</td><td colspan="4">Test voltage：</td><td rowspan="2">C≤0.33μF
UR≤100V IR≥15000MΩ
UR＞100V IR≥30000MΩ
C>0.33Mf
UR≤100V RC≥5000S
UR＞100V RC≥10000S</td></tr>
<tr><td>Rated voltage≤ 500V</td><td>100V</td><td>Rated voltage≥ 500V</td><td>500V</td></tr>
<tr><td>4</td><td>Capacitance</td><td colspan="4">Testing voltage is less than 3% of UR or 5V, take the lesser one Measured with frequency 1KHz</td><td>within the stated range</td></tr>
<tr><td>5</td><td>Dissipation Factor</td><td colspan="4">Testing voltage is less than 3% of UR or 5V, take the lesser one Measured with frequency 1KHz</td><td>DF<0.01</td></tr>
<tr><td rowspan="4">6</td><td rowspan="4">Tensile Strength of derivative terminal</td><td colspan="4">put a power to make the body bend 90°,then go to the normal, this operatation continues 5 seconds for the first time, then bend the body 90° to the reverse direction for the second time, this test needs two periods.</td><td rowspan="4">The capacitors should contact well, the machine should not breaken,such as pin break</td></tr>
<tr><td colspan="2">wire diameter</td><td colspan="2">Pull(N)</td></tr>
<tr><td colspan="2">d≤0.5</td><td colspan="2">5</td></tr>
<tr><td colspan="2">0.5＜d≤0.8</td><td colspan="2">10</td></tr>
</table>

7	Vibration	10~500Hz, acceleration is 98m/s^2 per second 1.5mm 3direction 6H per direction.	No defect
8	Solder ability	Solder bath, non activated colophony flux, solder temp.235℃±5℃,dwell time: 2s±0.5s	materials of jointing is good, jointing within 3s, make the terminal wet
9	jointing temperature	260±5℃ 10±1sec	no damnification, clear sign
			△C/C(%)≤2
10	Climate sequence	a. exothermic 85℃ 16 hours b. make hot circle 25～55℃ for the first period humidity: Ⅰ＞95%, Ⅱ 90～95% Ⅲ ＜ 95% c. low temperature -55±3℃ 2 hours d. low press(8.5kpa) 1 hour UR/5 minute e. make hot circle for the second period same as b item , within 15 minutes after the test, with stand voltage test UR/1minute	No hole or radian
			no damnification, clear sign
			△C/C(%)≤5
			△tg8≤0.008
			RilaC≥12500S
11	steady humidity and hot	temperature: 40±2℃ 21days humidity: 90%～95% within 15 minutes after the test, with stand voltage test UR/1minute	no damnification, clear sign
			△C/C(%)≤5
			△tg8≤0.005
			RilaC≥12500S
12	Endurance	temperature: 85℃ 1000h 1.25UR	no damnification, clear sign
			△C/C(%)≤8
			△tg8≤0.005
			RilaC≥12500S
13	Charge and Discharge	Charge and Discharge 10000times，the duration is 0.5S	△C/C(%)≤5
			△tg8≤0.005
			RilaC≥12500S

5.Shaping：



6.Dimension:

（Note： Special desigh for special requirements）

CAP	100/160V				250V				400V				630V			
	P	W	T	H	P	W	T	H	P	W	T	H	P	W	T	H
104	10	12	5	9	10	13	5	10	10	13	6	13	10	13	8	15
													15	18	6	12
154	10	12	6	10	10	13	6	12	15	18	5	12	15	18	6	13
224	10	12	5	10	10	13	7	13	15	18	6	12	15	18	8	15
	15	18	4	8	15	18	5	11	20	23	5	11	20	23	7	14
													25	28	6	13
334	10	13	7	11	15	18	6	12	15	18	7	13	20	23	8	15
	15	18	5	11	20	23	5	11	20	23	6	12	25	28	7	14
474	10	13	6	12	15	18	7	13	15	18	8	16	20	23	9	18
	15	18	5	12	20	23	3	12	20	23	7	13	25	28	8	17
									25	28	6	12				
684	15	18	6	13	15	18	9	14	20	23	7	13	25	28	8	17
	20	23	5	10	20	23	7	13	25	28	7	16	25	28	10	18
	20	23	7	13									30	34	10	17
105	15	18	7	14	15	18	11	16	15	18	11	19				
	20	23	6	12	20	23	9	14	20	23	10	18	25	28	12	22
	20	23	9	14	25	28	7	15	25	28	9	17	30	33	13	24
155	15	18	9	16	20	23	10	17	20	23	11	19	30	34	11	20
	2	023	7	14	25	28	9	16	25	28	10	18	35	38	12	23
225	15	18	12	17	20	23	11	20	25	28	12	22	30	33	16	26
	20	23	9	15	25	28	10	19	30	33	10	21	35	38	15	24
	25	28	8	15	30	33	9	17								
335	25	28	10	18	25	28	13	21	30	33	14	23	30	33	19	28
	30	33	9	17	30	33	11	19	35	38	13	22	35	38	17	26
475	30	33	10	20	30	33	13	23	30	33	17	26				
	35	38	9	19	35	38	12	22	35	38	15	25				
685	30	33	11	21	30	33	16	26								
	35	38	10	20	35	38	15	24								
106	30	33	14	24	30	33	19	28								
	35	38	13	23												
156	30	33	18	28												
	35	38	17	26												
226	30	33	19	29												
	35	38	17	27												

7. Epoxy Color :

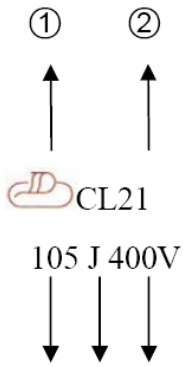
A . Brown-red

8. Acceptable Quality Level(AQL):

AQL is according to MIL-STD-105 table, By lot outgoing inspection.

1. Aspect AQL:1.0
2. Dimension AQL:1.0
3. Electric Characteristics Includes C, IR, TV and DF AQL:0.65
4. Mechanical Charateristics AQL:0.65

9. Marking：



① .Trademark

② .Type

③ .Symbol of Capacitance or capacitance(μ F)

④ .Capacitance Tolerance

⑤ .Rated Voltage

10.Package： Bulky cargo Carton ,inner packed with carton , packed in bag

CERTFICATE

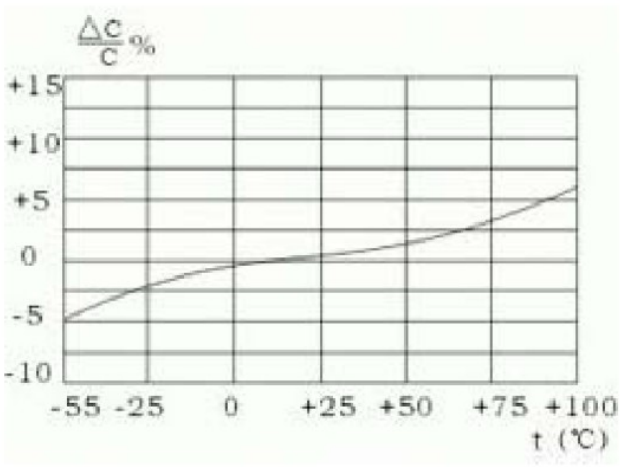
ROHS

TYPE		**VOLTAGE**	
Capacity		**Mfd**	
Quantity		**Lot No**	

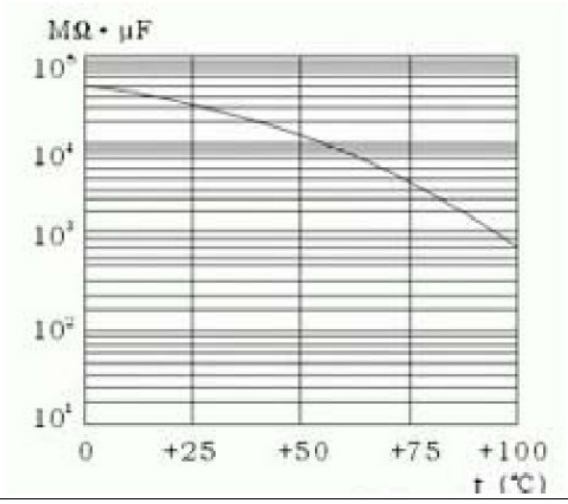
11. Typical Curves :

Dissipation factor vs. temperature（1KHZ）

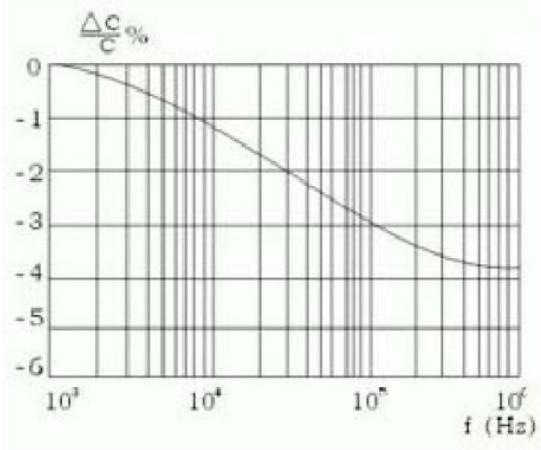
Capacitance vs. temperature（1KHZ）



Insulation resistance vs. temperature（1KHZ）



Capacitance vs. Frequency（25±5℃）



Dissipation factor vs. frequency （25±5℃）