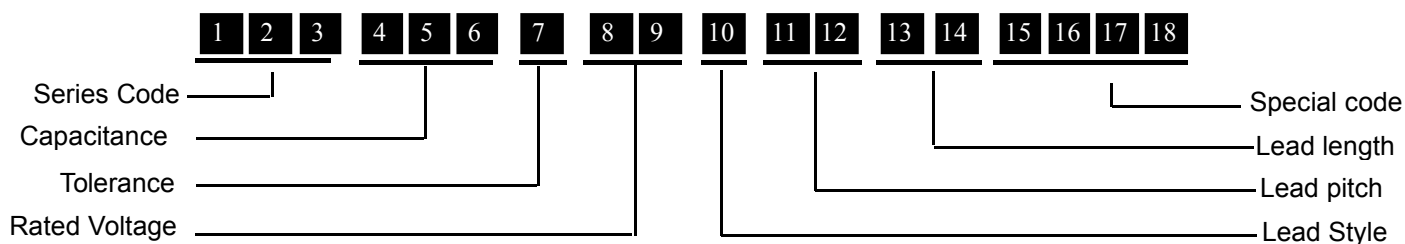


Type : MES Specification

Part Numbering System



Digit 1~3	Type	MES
Digit 4~6	Digit 4~5 indicate the first two figures of the capacitance value and the 6th digit indicate the number of zero added to obtain the rated capacitance in pF. EX.102=1000pF=1nF=0.001μF	
Digit 7	Code	F G H J K M
	Tolerance	±1% ±2% ±3% ±5% ±10% ±20%
Digit 8~9		A B C D E F G H J K L M N
	1	20 50 63 1100 15
	2	100 125 160 200 250 315 400 500 630 800 120 150
	3	1000 1250 1600 2000 2500 3150 4000 5000 6300 8000 1200 1400 1500
		P Q R S T U V W X Y
	1	240 300 330 440 540 600 700 850 900
	2	275 305 350 450 520 760
	3	280 310 480
Letter and then number indicate AC,but number and then Letter indicate DC. EX.2A=100VDC A2=100VAC		
Digit 10	Code	A B C D X
	Lead style	Straight lead Kink-Cutted Inward forming outward forming straight lead Cutted
	Code	E L T F G
	Lead style	Taping (Ammo) (直脚 TP,Po=12.7mm) Taping (Ammo) (直脚 TP, Po=15.0mm) Taping (Ammo) (同等彎 TP) Taping (Ammo) (內彎 TP) Taping (Ammo) (外彎 TP)
Digit 11~12	Code	P2 P3 P4 P5 P6 P8 P9 PA PB PC PD PE
	Pitch	3.5 4.0 4.5 5.0 6.0 7.0 7.5 8.0 9.0 10.0 31.0 15.0
	Code	PF PG PH PJ PK PL PM PN PP PQ PR PS
	Pitch	20.0 21.0 22.0 22.5 28.5 52.5 27.5 30.0 32.5 41.0 12.5 17.5
	Code	PT PU PV PW PX PY PZ PO
Digit 13~14	Code	L1* L2 L3 L4 L5 L6 L7* L8 L9 LA LB LC
	Length	15.0 3.5 4.0 4.5 10.0 15.0 20.0 TP 2.7 8.0 5.0 6.0
	Code	LD* LE LF LG LH LJ* LK LL LM LN LP LQ*
	Length	26.0 7.5 5.5 12.0 7.0 25.0 13.0 6.5 3.0 9.0 2.5 17.0
	Code	LR LS* LU* LW* LX LY* LZ* LV L0* LT* VL*
	Length	3.8 24.0 27.0 40.0 16.0 30.0 32.0 3.2 Axial 22 33

Notes: * Straight,length is minimum

Digit	Code	Explanation	Code	Explanation	Code	Explanation
Digit 15~16	DT	The different size(T)	DH	The different size(H)	EL	Low noise, The different size(T)
	HH	HF,The different size(H)	HT	HF, The different size(T)		
Digit 17~18	Special Number.					

Type : MES Specification			Electrical Characteristics			
No	Item		Performance		Test Conditions	Reference Standard
1	使用溫度範圍 Operating Temperature Range		-40°C ~ +125°C (+85°C to 125°C:decreasing Factor 1.25% per°C for VR(DC))			IEC 60384-2 2.1.1 2.2.5
2	額定電壓 Rated Voltage		100VDC,250VDC,400VDC			IEC 60384-2 2.1.4
3	耐電壓 Withstand Voltage	端子間 Between Terminals 端子外裝間 Between Terminals & Enclosure	No abnormality.		Rated voltage x 140% 2 sec Charge and discharge current shall not exceed 10 mA	IEC 60384-2 4.2.1
4	絕緣阻抗 Insulation Resistance		C≦0.33μF	3,750MΩ	Charge time: 60 ±5sec. Charge voltage: VR< 100VDC: 10VDC VR≧100VDC:100VDC Test Temp: 20°C	IEC 60384-2 4.2.4
			C>0.33μF	1,250MΩ*μF		
5	靜電容量 Capacitance		於指定範圍內 Within specified tolerance		at 1 KHz ±10% Measure voltage at 1 Vrms Test temp: 20°C	IEC 60384-2 4.2.2
6	散逸因數 Dissipation Factor		1.0 %max at 1KHz		Measure voltage at 1 Vrms Test temp: 20°C	IEC 60384-2 4.2.3
7	端子強度 Terminal Strength	抗拉強度 Pull Strength 扭轉強度 Bending Strength	端子不鬆斷 No cutting or slack of terminals		Wire diameter: 0.6&0.8 mm Load: 1 kg, time: 10 sec. Wire diameter: 1.0& 1.2mm Load: 2 kg, time: 20 sec. Wire diameter: 0.6 & 0.8 mm 1.0 & 1.2mm 90° x 4 time	IEC 60384-2 4.3
8	耐震性 Vibration Proof		無明顯異常 No abnormality of the appearance		Frequency range:10-55-10-55 Hz Amplitude: 0.75mm, 2 hrs/direction for 3 directions	IEC 60384-2 4.7
9	焊錫附著性 Solder ability		導線浸入後的表面至少需附著 95%的新焊錫 At least 95% of the surface of the lead wire dipped into is covered with new solder.		Solder temp: 245°C ±5°C Immersion time: 2 ±0.5sec. Solder: SnAgCu (Sn:96.5% Ag:3% Cu:0.5%)	IEC 60384-2 4.5
10	焊錫耐熱性 Resistance to Soldering heat	外觀 Appearance	無明顯異常 No abnormality on appearance		Solder temp: 265 ±5°C Immersion time: 10±0.5 sec.	IEC 60384-2 4.4
		耐電壓 Withstand Voltage	依項目3 Comply with item 3			
		靜電容量變化率 Capacitance Change	△C/C≦±3% Within ±3%			
		散逸因數 Dissipation Factor	於項目6範圍以內 Within spec of item 6 above.			
		絕緣阻抗 Insulation Resistance	Same as the spec of item 4 above			

Type : MES Specification				Electrical Characteristics																		
No	Item		Performance	Test Conditions			Reference Standard															
11	耐寒性 Cold Resistance	靜電容量變化率 Capacitance Change	$\Delta C/C \leq \pm 5\%$ Within $\pm 5\%$	Temperature: $-40 \pm 2^{\circ}\text{C}$ Duration: 96 ± 4 hrs			IEC 60384-2 4.10.4															
12	耐熱性 Dry Heat Resistance	絕緣阻抗 Insulation Resistance	50% of minimum specified value	Temperature: $+85 \pm 2^{\circ}\text{C}$ Duration: 96 ± 4 hrs			IEC 60384-2 4.10.2															
		靜電容量變化率 Capacitance Change	Within $\pm 5\%$																			
13	溫度循環 Temperature Cycle	外觀 Appearance	無明顯異常 No abnormality on appearance	Total: 6 cycle <table><tr><td>Step</td><td>Temp</td><td>Time</td></tr><tr><td>1</td><td>$-40 \pm 2^{\circ}\text{C}$</td><td>$30 \pm 1$min</td></tr><tr><td>2</td><td>$+25 \pm 2^{\circ}\text{C}$</td><td>10~15min</td></tr><tr><td>3</td><td>$+85 \pm 2^{\circ}\text{C}$</td><td>$30 \pm 1$min</td></tr><tr><td>4</td><td>$+25 \pm 2^{\circ}\text{C}$</td><td>10~15min</td></tr></table>			Step	Temp	Time	1	$-40 \pm 2^{\circ}\text{C}$	30 ± 1 min	2	$+25 \pm 2^{\circ}\text{C}$	10~15min	3	$+85 \pm 2^{\circ}\text{C}$	30 ± 1 min	4	$+25 \pm 2^{\circ}\text{C}$	10~15min	IEC 60384-2 4.6
		Step	Temp				Time															
		1	$-40 \pm 2^{\circ}\text{C}$				30 ± 1 min															
		2	$+25 \pm 2^{\circ}\text{C}$				10~15min															
		3	$+85 \pm 2^{\circ}\text{C}$				30 ± 1 min															
		4	$+25 \pm 2^{\circ}\text{C}$				10~15min															
耐電壓 Withstand Voltage	依項目3 Comply with item 3																					
絕緣阻抗 Insulation Resistance	50% of minimum specified value																					
靜電容量變化率 Capacitance Change	Within $\pm 5\%$																					
散逸因數 Dissipation Factor Change	$\Delta DF \leq 1.0\%$ at 1KHz (20°C)																					
14	Damp heat Steady state	Appearance	No abnormality on appearance Marking to be legible	Humidity: $90 \sim 95\%$ RH Temperature: $+40 \pm 2^{\circ}\text{C}$ Duration: 504 ± 1 hrs Measure after exposing at normal state for 1.5 ± 0.5 hrs.			IEC 60384-2 4.11															
Withstand Voltage		Comply with item 3																				
Insulation Resistance		50% of minimum specified value																				
Capacitance Change		Within $\pm 5\%$																				
Dissipation Factor Change		$\Delta DF \leq 1.0\%$ at 1KHz (20°C)																				
15	穩態濕熱試驗 Damp heat , Steady state	外觀 Appearance	無明顯異常 No abnormality on appearance 印字可辨識 Marking to be legible	Temperature: $+85 \pm 2^{\circ}\text{C}$ Duration: $1,000 +48/-0$ hrs Applied voltage $125\% \times VR$ through series resistor of $20 \sim 1000\Omega/V$ to the Capacitor Measure after exposing at normal state for 4 hrs.			IEC 60384-2 4.12															
		耐電壓 Withstand Voltage	依項目3 Comply with item 3																			
		絕緣阻抗 Insulation Resistance	50% of minimum specified value																			
		靜電容量變化率 Capacitance Change	Within $\pm 8\%$																			
		散逸因數變化量 Dissipation Factor Change	$\Delta DF \leq 1.0\%$ at 1KHz (20°C)																			

Storage conditions for capacitors:

Temperature: $+5 \sim +35^\circ\text{C}$

Humidity: $\leq 75\%$ RH

Capacitor storage time:

Calculated by cycle, the validity period is two years (If the electrical characteristics of the product exceed two years, it is necessary to reselect and inspect the appearance of the product)

Strong Components Co.,Ltd