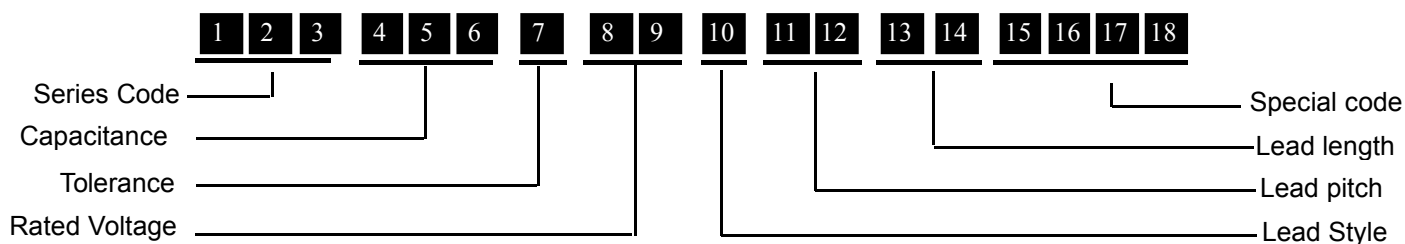


Type : PPN Specification

Part Numbering System

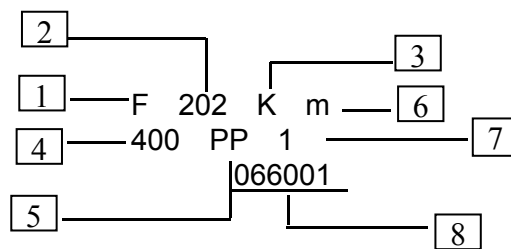


Digit 1~3	Type	PPN
Digit 4~6	Digit 4~5 indicate the first two figures of the capacitance value and the 6th digit indicate the number of zero added to obtain the rated capacitance in pF. EX.102=1000pF=1nF=0.001μF	
Digit 7	Code	F G H J K M
	Tolerance	±1% ±2% ±3% ±5% ±10% ±20%
Digit 8~9		A B C D E F G H 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 TP) Taping (Ammo) (内彎 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	Pitch	51.0 27.0 37.5 25.0 12.0 35.0 16.0 Axial
	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.					

● Marking



1	: Company symbol	2	: Capacitance	3	: Tolerance	4	: Rated voltage
5	: Type name	6	: Year / Month	7	: Week	8	: Production batch number (P $\geq$ 10.0mm,H $\geq$ 13.0mm)

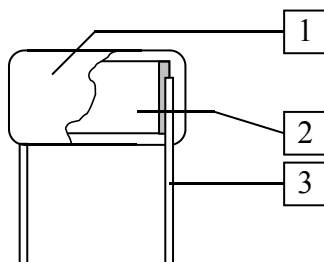
Year	Month	Mark	Year	Month	Mark	Year	Month	Mark	Year	Month	Mark
2017 2021 2025 ...	1	A	2018 2022 2026 ...	1	N	2019 2023 2027 ...	1	a	2020 2024 2028 ...	1	n
	2	B		2	P		2	b		2	p
	3	C		3	Q		3	c		3	q
	4	D		4	R		4	d		4	r
		E		5	S		5	e		5	s
	6	F		6	T		6	f		6	t
	7	G		7	U		7	g		7	u
	8	H		8	V		8	h		8	v
	9	J		9	W		9	j		9	w
	10	K		10	X		10	k		10	x
	11	L		11	Y		11	l		11	y
	12	M		12	Z		12	m		12	z

Cycle every 4 years, rotating back and forth

Code: A: January 2021, January 2025, January 2029...

Code: B: February 2021, February 2025, February 2029...

Construction



- 1 : Epoxy resin coating
- 2 : Polypropylene film/ Aluminium foil
- 3 : Lead wire

Type : PPN Specification			Electrical Characteristics		
No	項 目 Item		性 能 Performance	條 件 Test Conditions	參考標準 Reference Standard
1	使用溫度範圍 Operating Temperature Range		-40°C ~ +105°C (+85°C to 105°C:decreasing factor1.35%per°C for VR(DC))		IEC 60384-16 2.1.1 2.2.5
2	額 定 電 壓 Rated Voltage		100VDC,250VD,400VDC		IEC 60384-16 2.1.4
3	耐電壓 Withstand Voltage	端 子 間 Between Terminals 端子外裝間 Between Terminals & Enclosure	No abnormality.		IEC 60384-16 4.2.1
4	絕 緣 阻 抗 Insulation Resistance		C $\leq$ 0.33 μ F VR $\leq$ 100V 100,000M Ω C $>$ 0.33 μ F VR $>$ 100V 100,000 S	Charge time: 60 $\pm$ 5sec. Charge voltage: VR < 100VDC: 50VDC VR < 500VDC: 100VDC VR $\geq$ 500VDC. 500VDC Test Temp: 20°C	IEC 60384-16 4.2.4
5	靜 電 容 量 Capacitance		於 指 定 範 圍 內 Within specified tolerance	at 1 KHz $\pm$ 10% Measure voltage at 1 Vrms Test temp: 20°C	IEC 60384-16 4.2.2
6	散 逸 因 數 Dissipation Factor		0.1 %max at 1KHz	Measure voltage at 1 Vrms Test temp: 20°C	IEC 60384-16 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 60384-16 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 60384-16 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 $\pm$ 5°C Immersion time: 2 $\pm$ 0.5sec. Solder: SnAgCu (Sn:96.5% Ag:3% Cu:0.5%)	IEC 60384-16 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 $\pm$ 5°C Immersion time: 10 $\pm$ 0.5 sec.	IEC 60384-16 4.4
		耐 電 壓 Withstand Voltage	依 項 目 3 Comply with item 3		
		靜電容量變化率 Capacitance Change	Within $\pm$ 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 : PPN 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	Within ±5%	Temperature: -40 ±2°C Duration: 96±4 hrs			IEC 60384-16 4.10.4
12	耐熱性 Dry Heat Resistance	絕緣阻抗 Insulation Resistance	50% of minimum specified value	Temperature: +85 ±2°C Duration: 96±4hrs			IEC 60384-16 4.10.2
		靜電容量變化率 Capacitance Change	Within ±5%				
13	溫度循環 Temperature Cycle	外觀 Appearance	無明顯異常 No abnormality on appearance	Total: 6 cycle			IEC 60384-16 4.6
		耐電壓 Withstand Voltage	依項目 3 Comply with item 3				
		絕緣阻抗 Insulation Resistance	50% of minimum specified value	Step	Temp	Time	
		靜電容量變化率 Capacitance Change	Within ±5%	1	-40±2°C	30 ±1min	
				2	+25±2°C	10~15min	
		散逸因數 Dissipation Factor Change	0.3 %max at 1KHz (20°C)	3	+85±2°C	30 ±1min	
			4	+25±2°C	10~15min		
14	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	Humidity: 90~95% RH Temperature: +40 ±2°C Duration: 504 ± 1 hrs			IEC 60384-16 4.11
		耐電壓 Withstand Voltage	依項目 3 Comply with item 3				
		絕緣阻抗 Insulation Resistance	50% of minimum specified value	Measure after exposing at normal state for 1.5±0.5 hrs.			
		靜電容量變化率 Capacitance Change	Within ±5%				
		散逸因數變化量 Dissipation Factor Change	0.1 %max at 1KHz (20°C)				
15	Endurance Test	外觀 Appearance	無明顯異常 No abnormality on appearance 印字可辨識 Marking to be legible	Temperature: +85 ±2°C Duration: 1,000 +48/-0 hrs			IEC 60384-16 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	Applied voltage 125%x VR through series resistor of 20~1000Ω/V to the Capacitor Measure after exposing at normal state for 4 hrs.			
		靜電容量變化率 Capacitance Change	Within ±5%				
		散逸因數變化量 Dissipation Factor Change	0.2 %max at 1KHz (20°C)				