CLASS I TEMPERATURE COMPENSATION TYPE

◆ Characteristics

1. Low dissipation factor, high reliability factor;
2. Low remnant inductance, excellent high frequency function;
3. Used in temperature compensate, it has high Q value and excellent temperature stability.

◆ General Specification

Operating Temperature Range	-25℃~+85℃
Working Voltage	DC 50V, 500V.
With Standing Voltage	3 times of working voltage.
Capacitance	Be measured at 20±2℃, with 1±0.1MHz and 5 Vrms max..
Capacitance Tolerance	1 - 9PF ±0.25PF(C) and ±0.5PF(D). 10PF and Above ±5%(J) and ±10%(K).
Q Quality Factor	≥30pF Q value≥1000 < 30pF Q value≥400+20C
Insulation Resistance (IR)	at working voltage±3%, test 60±5 second. IR≥10000MΩ.
Temperature Characteristic	NPO 0±60PPM/℃ N150 150±60PPM/℃ N220 220±60PPM/℃ N470 470±60PPM/℃ N750 750±60PPM/℃ SL +300 ~ -1000PPM/℃.

◆ Dimension, Capacitance, Voltage Table

DC50V							DC500V		Tolerance	Dmax (mm)	F (mm)
NPO	N150	N220	N330	N470	N750	SL	NPO	SL			
0.5-9	1-9	1-9	2-9	2-9	2-9	2-9	1-9	2-9	C; D	5.0	2.50 5.00 6.35
10-47	10-39	10-47	10-47	10-47	10-47	10-180	10-12	10-30	K; J		
50-68	47-56	50-56	50-68	50-68	50-68	200-270	13-15	33-120	K; J	6.0	
82-100	62-82	68-100	82-100	82-100	82-100	300-330	16-22	---	K; J	7.0	
120-150	100-150	120-150	120-150	120-150	120-180	360-470	---	200-270	K; J	8.0	
180-200	150-180	180-200	180-200	180-200	200-220	500-560	24-47	200-270	K; J	9.0	
220-270	200-220	220	220	220		680-820	---	300-470	K; J	10.0	

CLASS II HIGH DIELECTRIC CONSTANT

◆ Characteristics

1. Low dissipation factor, high reliability factor;
2. Small volume, low remnant inductance;
3. Many types of temperature characteristics.

◆ General Specification

Operating Temperature Range	-25℃~+85℃
Working Voltage	DC 50V, 500V.
With Standing Voltage	3 times of working voltage.
Capacitance	Be measured at 20±2℃, with 1±0.1KHz and 5 Vrms max..
Capacitance Tolerance	K: ±10% M: ±20% Z: +80%-20% P: +100%-0% S: +50%-20%
Dissipation Factor (D.F.)	Same condition as the capacitance tgδ ≤ 2.5%
Insulation Resistance (IR)	at working voltage±3%, test 60±5 second. C < 0.02UF IR≥10000MΩ; 0.02UF<C<0.1UF IR≥7500MΩ.
Temperature Characteristic	Y5P ±10% Y5U +22%-56% Z5U +22%-56% Y5V +22%-80% Z5V +22%-82%

◆ Dimension, Capacitance, Voltage Table

DC50V			DC500V			Dmax	F
Y5P	Y5U, Z5U	Y5V, Z5V	Y5P	Y5U, Z5U	Y5U, Z5U	(mm)	(mm)
221-152	222-472	472-103	101-102	202-222	202-222	5.0	2.50 5.00 6.35
182-272	502-103	103-203	122	272	272-472	6.0	
302-392	---	203-223	152-182	392-472	---	7.0	
472-682	---	---	152-182	---	103	8.0	
103	203-223	---	---	---	---	9.0	
---	---	---	272-332	103	---	10.0	
---	---	---	472	---	223	12.0	
---	---	---	103	223	---	14.0	

CLASS III SEMI CONDUCTIVE TYPE

◆ Characteristics

1. Small volume, low remnant inductance;
2. High capacitance;
3. Many types of temperature characteristics.

◆ General Specification

Operating Temperature Range	-25℃~+85℃
Working Voltage	DC 16V, 25V, 50V.
With Standing Voltage	1.5times of working voltage.
Capacitance	Be measured at 20±2℃, with 1±0.1KHz and 0.1 Vrms max..
Capacitance Tolerance	K: ±10% M: ±20% Z: +80%-20% P: +100%-0% S: +50%-20%
Dissipation Factor (D.F.)	Same condition as the capacitance DC16V tgδ ≤ 7% DC25V, 50V tgδ ≤ 5%
Insulation Resistance (IR)	With rated voltage test 60 seconds. DC16V IR>100MΩ; DC25V, 50V IR>1000MΩ.
Temperature Characteristic	Y5P ±10% Y5U +22%-56% Y5V +22%-80%

◆ Dimension, Capacitance, Voltage Table

DC16V			DC25V			DC50V			Dmax	F
Y5P	Y5U	Y5V	Y5P	Y5U	Y5V	Y5P	Y5U	Y5V	(mm)	(mm)
---	---	---	---	---	---	---	---	103-223	4	2.50 5.00 6.35
---	---	---	---	---	---	472-103	---	333-473	5	
---	---	104	---	---	104	153-223	---	---	6	
---	104	---	---	104	---	333-473	---	683-104	7	
---	---	224	---	---	224	---	---	---	9	
---	---	---	---	---	---	683-104	204-224	154-224	10	