

Datasheet

Item no. 1589457

CERAMIC DISC CAPACITORS TYPE: CLASS II (50V~1KV DC) DIELECTRIC CONSTANT(HI-K)

FEATURES:

- Non linear temperature coefficient of capacitance.
- Large capacitance in small sizes.
- High insulation resistance.
- All capacitors are accord with RoHS standards.

SPECIFICATIONS:

Temperature Characteristics	Y5P	Y7R	Z5U	Z5V
Operating Temperature Range	-25°C ~ +85°C	-55°C ~ +125°C	-10°C ~ +85°C	-10°C ~ +85°C
Capacitance Range	100pF~1000pF @1± 0.1 MHz, 1.0~3.0 Vrms,± 25°C			
Dissipation Factor	2.5% Max.	2.5% Max.	5.0% Max.	5.0% Max.
Test Voltage(50mA Max.)	W.V<1KV = = >2.5Time of Rated Voltage for 1~5sec W.V<1KV = = >2.0Time of Rated Voltage for 1~5sec			
Insulation Resistances	10,000MΩ[min. measured@W.V.DC,but not exceeding 500VDC			
Capacitance Change Over Temperature Range	± 10% (-25°C ~ +85°C)	± 15% (-55°C ~ +125°C)	± 22%, -56% (-10°C ~ +85°C)	± 22%, -82% (-10°C ~ +85°C)

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Standard Products and Maximum Diameter(mm)

Cap. (pF/μF)	Y5P			X7P			Z5U			Z5V		
	50/100V	500V	1KV	50/100V	500V	1KV	50/100V	500V	1KV	50/100V	500V	1KV
100~470pF	5.5	5.5	5.5	5.5	5.5	5.5						
560	5.5	5.5	6.5	5.5	5.5	6.5						
680	5.5	5.5	6.5	5.5	5.5	6.5						
750	5.5	6.5	6.5	5.5	5.5	6.5						
820	5.5	6.5	6.5	5.5	6.5	6.5						
1000	5.5	6.5	6.5	5.5	6.5	7.5		5.5	5.5	5.5		
1500	5.5	7.5	7.5	5.5	7.5	8.5		5.5	6.5	5.5		
2200	5.5	8.5	8.5	6.5	9.5	10.5	5.5	6.5	6.5	5.5		
2700	6.5	9.5	10.5	7.5	9.5		5.5	6.5	7.5	5.5		
3300	6.5	9.5	12.5	7.5	10.5		5.5	7.5	8.5	5.5		
3900	7.5	10.5	12.5	8.5	12.5		5.5	7.5	8.5	5.5		
4700	7.5	10.5	12.5	8.5	12.5		5.5	7.5	9.5	5.5	6.5	7.5
5600	8.5	12.5	14.5	10.5	15.5		5.5	8.5	9.5	5.5	7.5	7.5
6800	8.5	12.5	14.5	10.5	15.5		6.5	8.5	10.5	5.5	7.5	8.5
8200	9.5	14.5	16.5	10.5	15.5		6.5	9.5	10.5	5.5	8.5	10.5
0.01μF	9.5	14.5	16.5	10.5	15.5		6.5	10.5	12.5	6.5	8.5	10.5
0.015							8.5	12.5	14.5	7.5	10.5	12.5
0.022							9.5	14.5	16.5	8.5	12.5	12.5
0.033										9.5	16.5	18.5
0.047										10.5	16.5	20.5
0.068											18.5	
0.1											23.5	
Thickness	4.0mm Max.			4.0mm Max.			4.0mm Max.			4.0mm Max.		

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HOW TO ORDER(16V~1KV)

PART NUMBER CODE

<u>I</u>	<u>CH</u>	<u>1H</u>	<u>101</u>	<u>J</u>	<u>06</u>	<u>A</u>	<u>5</u>	<u>1</u>	<u>6</u>	<u>E</u>	<u>N</u>
1	2	3	4	5	6	7	8	9	10	11	12

1. TYPE

T: Temperature Compensation (Class 1)
H: High Dielectric Constant (Class 2)
S: Semi Conductive (Class 3)

2. Temperature Characteristics

* Temperature Compensating type

Code	CH(NPO)	UJ	SL
Temp. coeff. (ppm/°C)	0± 60	-750± 120	+350~ -1000

* High dielectric constant type

Code	B(Y5P)	R(X7P)	E(Z5U)	F(Z5V)
Cap. Change (%)	±10	±15	+22 -56	+22 -82

* Semi conductive type

Code	B(Y5P)	E(Y5U)	F(Y5V)
Change (%)	±15	+22 -56	+22 -82

3. Rated Voltage

Code	1C	1E	1H	2A	2E	2H	3A
Rated Voltage	16 VDC	25 VDC	50 VDC	100 VDC	250 VDC	500 VDC	1K VDC

4. Capacitance

Code	Capacitance(pF)
010	1
1R5	1.5
100	10
101	100
102	1000
473	47000
104	100000
224	220000

5. Capacitance Tolerance

Code	Cap. Tol.
C	±0.25 pF
D	±0.5 pF
J	±5%
K	±10%
M	±20%
S	+50%~-20%
Z	+80%~-20%
P	+100%~-0%

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6. Body Diameter (mm)

Code	05	06	07	08	09	10	11	12	14	16	18	20
D max.	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5	14.5	16.5	18.5	20.5

7. Lead Shape Code

Code	Packing Method	Lead Configuration
A	Taping Box	KINK
B		STRAIGHT
H	Taping Reel	KINK
R		STARAIGHT
S	Bulk	SHORT STRAIGHT
L		LONG STRAIGHT
K		INSIDE KINK
D		OUTSIDE KINK
Y		VERTICAL CRIMP

8. Lead Spacing Code (F)

Code	Dimension(mm)
2	12.5±1.0
5	5.0±1.0
6	6.35±1.0
7	7.50±1.0
0	10.0±1.0
1	12.5±1.0

10. Lead Diameter Code (d)

Code	Diameter(mm)
5	0.5 ± 0.05
6	0.6+0.06/-0.05

9. Lead Length Code(L)

Code	Dimension(mm)
1	15 min
2	23 min
3	3.5± 1.0
5	5.0± 1.0
0	10.0±1.0

11. Code: E Epoxy Coating
 Nil Durez Coating

12. Code: N RoHS Type