

Panasonic Ceramic Disc Capacitors

PANASONIC ECC SERIES (CLASS I)

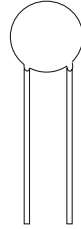
- Features:**
- Conform to EIA Standard
 - Linear temperature coefficient of capacitance
 - High stability of capacitance
 - Low loss at wide range of frequency
- Specifications:**
- Operating temperature range: -55°C to +85°C
 - Temperature characteristics: Conform to EIA classes GP & NPO. GP: General purpose capacitors with temp. char. between +150 and -1500PPM/°C (EIA U2M char.) NPO: Max. cap. change of ±5% from -55°C to +85°C.

PANASONIC ECK SERIES (CLASS II)

- Features:**
- Conform to EIA Standard
 - Large capacitance in small sizes
 - Non linear temperature coefficient of capacitance
 - High temperature stability (for 1-3KV, Y5P char.)
 - Low loss at pulse voltage (for pulse circuit only)
- Specifications:**
- Operating temperature range: -30°C to +85°C (25-500V), -25°C to +125°C (1-3KV)
 - Dissipation factor: Y5P: 2.5% max., Y5V and Z4V: 5% max., 1K (tan.), 25 x 10³ at 1kHz to 1 Vrms, and 20°C
 - Temperature characteristics: Per EIA code. Y5P: Max. cap. change of ±10% from -25°C to +85°C, Y5V: Max. cap. change of ±22, -82% from +10°C to +60°C, E: Max. cap. change is +20 - -55% over temp. range of -25°C to +85°C, B: Max. cap. change is ±10% over temp. range of -25°C to +85°C, V: Max. cap. change is +30 - -80% over temp. range of 0°C to +70°C
 - Insulation resistance: 10,000 ohms min.
 - Dielectric strength: 250V (200% for 1-3KV) of rated voltage for 1-5 sec.

PANASONIC ECF SERIES (CLASS III)

- Features:** SB/SR (Intergranular barrier layer type)
- Linear temperature characteristics of capacitance
 - Stable capacitance change over the specified temperature
 - Low loss at wide range of frequency
 - Cost saving by replacing film capacitors
 - SF (Surface barrier layer type)
 - Ultra large capacitance in small sizes
- Specifications:**
- Operating temperature range: -25°C to +85°C
 - Dissipation factor/tan (at 1kHz, 1 ±0.2 Vrms, 20°C): SR, SB, 1 ±0.2 V, SF 0.1 ±0.2 V; SB, SR...25 x 10³ max., SF...75 x 10³ max.
 - Insulation resistance (at 20°C): SB, SR, SF...1,000M ohms or 100M ohms mF, whichever is the smaller
 - Temperature characteristics: SB: +10% from -25° to +85°C, SR: ±15% from -25° to +85°C, SF: +30, -85% from -25° to +85°C



Voltage	Capacitance	Tolerance	Temp. Char.	Dimensions (mm)					Digi-Key Part No.	Pricing				Panasonic Part No.
				Dia.	Thickness	Lead Space	10	100		1,000	5,000	10,000	25,000	
100	82pf	±5%	NPO	8.0	3.5	6.35	P4455-ND	1.70	11.46	59.14	49.90/M	47.13/M	46.20/M	ECC-F2A820JCE
500	39pf	±10%	GP	5.5	3.5	6.35	P4007-ND	1.13	7.64	39.42	33.27/M	31.42/M	30.80/M	ECC-D2H390KE
500	18pf	±5%	NPO	7.0	3.5	6.35	P4403-ND	1.57	11.09	60.48	52.42/M	50.40/M	48.39/M	ECC-D2H180JCE
500	39pf	±5%	NPO	8.5	3.5	6.35	P4407-ND	1.70	12.01	65.52	56.79/M	54.60/M	52.42/M	ECC-D2H390JCE
500	82pf	±5%	NPO	13.0	3.5	9.5	P4411-ND	2.98	21.28	119.17	110.66/M	106.40/M	102.15/M	ECC-D2H820JCE
500	120pf	±5%	NPO	13.0	3.5	9.5	P4413-ND	2.90	20.72	116.03	107.75/M	103.60/M	99.46/M	ECC-D2H121JCE
500	150pf	±5%	NPO	13.0	3.5	9.5	P4414-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECC-D2H151JCE
25	.047μf	+80%-20%	Z4V	8.5	3.5	6.35	P4307-ND	1.34	9.03	46.59	39.32/M	37.13/M	36.40/M	ECK-F1E473ZVE
100	1μf	+80%-20%	Z4V	12.2	3	5.0	P4201-ND	2.23	15.71	35.84	74.26/V	71.40/V	58.55/V	ECK-F1E104ZV
25	6800pf	+80%-20%	Y5V	8.0	3.5	6.35	P4209-ND	1.03	6.94	35.68	30.24/M	28.56/M	28.00/M	ECC-F2A682ZFE
1K	100pf	±10%	Y5P	6.0	5.0	5.00	P4116-ND	2.18	15.40	84.00	72.80/M	70.00/M	67.20/M	ECK-D3A101KBN
1K	120pf	±10%	Y5P	6.0	5.0	5.00	P4117-ND	2.18	15.40	84.00	72.80/M	70.00/M	67.20/M	ECK-D3A121KBN
1K	150pf	±10%	Y5P	6.0	5.0	5.00	P4118-ND	2.14	15.09	82.32	71.35/M	68.60/M	65.86/M	ECK-D3A151KBN
1K	180pf	±10%	Y5P	6.0	5.0	5.00	P4119-ND	2.14	15.09	82.32	71.35/M	68.60/M	65.86/M	ECK-D3A181KBN
1K	220pf	±10%	Y5P	6.0	5.0	5.00	P4120-ND	2.14	15.09	82.32	71.35/M	68.60/M	65.86/M	ECK-D3A221KBN
1K	270pf	±10%	Y5P	6.0	5.0	5.00	P4121-ND	2.14	15.09	82.32	71.35/M	68.60/M	65.86/M	ECK-D3A271KBN
1K	330pf	±10%	Y5P	8.0	5.0	5.00	P4122-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A331KBN
1K	390pf	±10%	Y5P	8.0	5.0	5.00	P4123-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A391KBN
1K	470pf	±10%	Y5P	8.0	5.0	5.00	P4124-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A471KBN
1K	560pf	±10%	Y5P	8.0	5.0	5.00	P4125-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A561KBN
1K	680pf	±10%	Y5P	8.0	5.0	5.00	P4126-ND	2.62	18.48	100.80	87.36/M	84.00/M	80.64/M	ECK-D3A681KBN
1K	820pf	±10%	Y5P	10.0	5.0	5.00	P4127-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A821KBN
1K	1000pf	±10%	Y5P	10.0	5.0	5.00	P4128-ND	2.51	17.92	100.35	93.19/M	89.60/M	86.02/M	ECK-D3A102KBN
1K	1200pf	±10%	Y5P	10.0	5.0	5.00	P4129-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECK-D3A122KBN
1K	1500pf	±10%	Y5P	11.0	5.0	5.00	P4130-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECK-D3A152KBN
1K	1800pf	±10%	Y5P	11.0	5.0	5.00	P4131-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECK-D3A182KBN
1K	2200pf	±10%	Y5P	13.0	5.0	5.00	P4199-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECK-D3A222KBP
1K	2700pf	±10%	Y5P	13.0	5.0	5.00	P4211-ND	3.14	22.40	125.44	116.48/M	112.00/M	107.52/M	ECK-D3A272KBP
1K	3300pf	±10%	Y5P	13.5	5.0	10.00	P4134-ND	3.53	25.20	141.12	131.04/M	126.00/M	120.96/M	ECK-D3A332KBN
1K	3900pf	±10%	Y5P	15.5	5.0	10.00	P4135-ND	4.55	33.43	192.02	184.92/M	177.80/M	170.69/M	ECK-D3A392KBN
1K	4700pf	±10%	Y5P	18.0	5.0	10.00	P4136-ND	5.38	39.48	226.80	218.40/M	210.00/M	201.60/M	ECK-D3A472KBN
1K	5600pf	±10%	Y5P	18.0	5.0	10.00	P4137-ND	5.38	39.48	226.80	218.40/M	210.00/M	201.60/M	ECK-D3A562KBN
1K	6800pf	±10%	Y5P	22.0	5.0	10.00	P4138-ND	7.56	55.51	318.88	307.08/M	295.27/M	283.46/M	ECK-D3A682KBN
1K	8200pf	±10%	Y5P	22.0	5.0	10.00	P4139-ND	7.56	55.51	318.88	307.08/M	295.27/M	283.46/M	ECK-D3A822KBN
2K	10000pf	±10%	Y5P	22.0	5.0	10.00	P4140-ND	8.06	60.48	357.50	344.07/M	336.00/M	322.56/M	ECK-D3A103KBN
2K	100pf	±10%	Y5P	7.0	5.0	7.5	P4474A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D101KBP
2K	120pf	±10%	Y5P	7.0	5.0	7.5	P4475A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D121KBP
2K	150pf	±10%	Y5P	7.0	5.0	7.5	P4476A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D151KBP
2K	180pf	±10%	Y5P	7.0	5.0	7.5	P4477A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D181KBP
2K	220pf	±10%	Y5P	7.0	5.0	7.5	P4478A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D211KBP
2K	270pf	±10%	Y5P	7.0	5.0	7.5	P4479A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D271KBP
2K	330pf	±10%	Y5P	7.0	5.0	7.5	P4480A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D331KBP
2K	390pf	±10%	Y5P	7.0	5.0	7.5	P4481A-ND	3.03	21.67	121.34	112.68/M	108.34/M	104.01/M	ECK-D3D391KBP
2K	470pf	±10%	Y5P	7.5	5.0	7.5	P4482A-ND	3.26	23.27	130.33	121.02/M	116.37/M	111.71/M	ECK-D3D471KBP
2K	560pf	±10%	Y5P	8.0	5.0	7.5	P4483A-ND	3.26	23.27	130.33	121.02/M	116.37/M	111.71/M	ECK-D3D561KBP
2K	680pf	±10%	Y5P	9.0	5.0	7.5	P4484A-ND	3.45	24.61	137.82	127.98/M	123.05/M	118.13/M	ECK-D3D681KBP
2K	820pf	±10%	Y5P	9.0	5.0	7.5	P4485A-ND	3.45	24.61	137.82	127.98/M	123.05/M	118.13/M	ECK-D3D821KBP
2K	1000pf	±10%	Y5P	10.0	5.0	7.5	P4486A-ND	4.19	29.96	167.78	155.80/M	149.80/M	143.81/M	ECK-D3D102KBP
2K	1200pf	±10%	Y5P	10.5	5.0	7.5	P4487A-ND	4.35	31.93	183.45	176.66/M	169.87/M	163.07/M	ECK-D3D122KBP
2K	1500pf	±10%	Y5P	12.0	5.0	7.5	P4488A-ND	5.07	37.21	213.79	205.87/M	197.95/M	190.04/M	ECK-D3D152KBP
2K	1800pf	±10%	Y5P	12.5	5.0	7.5	P4489A-ND	5.07	37.21	213.79	205.87/M	197.95/M	190.04/M	ECK-D3D182KBP
2K	2200pf	±10%	Y5P	14.0	5.0	10.0	P4490A-ND	7.81	57.33	329.35	317.15/M	304.95/M	292.76/M	ECK-D3D222KBP
2K	2700pf	±10%	Y5P	16.0	5.0	10.0	P4491A-ND	7.74	58.02	342.97	330.08/M	322.34/M	309.45/M	ECK-D3D272KBP
2K	3300pf	±10%	Y5P	17.0	5.0	10.0	P4492A-ND	9.34	70.06	414.12	398.56/M	389.22/M	373.65/M	ECK-D3D332KBP
2K	3900pf	±10%	Y5P	18.0	5.0	10.0	P4493A-ND	9.92	74.39	439.74	423.21/M	413.29/M	396.76/M	ECK-D3D392KBP
2K	4700pf	±10%	Y5P	25.0	5.0	10.0	P4494A-ND	10.85	81.37	481.01	462.93/M	452.08/M	434.00/M	ECK-D3D472KBP
2K	5600pf	±10%	Y5P	25.0	5.0	10.0	P4495A-ND	10.85	81.37	481.01	462.93/M	452.08/M	434.00/M	ECK-D3D562KBP
3K	100pf	±10%	Y5P	7.5	6.0	7.5	P4496A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F101KBP
3K	120pf	±10%	Y5P	7.5	6.0	7.5	P4497A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F121KBP
3K	150pf	±10%	Y5P	7.5	6.0	7.5	P4498A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F151KBP
3K	180pf	±10%	Y5P	7.5	6.0	7.5	P4499A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F181KBP
3K	220pf	±10%	Y5P	7.5	6.0	7.5	P4500A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F221KBP
3K	270pf	±10%	Y5P	7.5	6.0	7.5	P4501A-ND	3.11	22.20	124.33	115.46/M	111.02/M	106.58/M	ECK-D3F271KBP
3K	330pf	±10%	Y5P	8.0	6.0	7.5	P4502A-ND	3.30	23.54	131.82	122.41/M	117.70/M	113.00/M	ECK-D3F331KBP
3K	390pf	±10%	Y5P	9.0	6.0	7.5	P4503A-ND	3.48	24.88	139.31	129.37/M	123.99/M	119.42/M	ECK-D3F391KBP
3K	470pf	±10%	Y5P	9.5	6.0	7.5	P4504A-ND	3.75	26.75	149.80	139.10/M	133.75/M	128.40/M	ECK-D3F471KBP
3K	560pf	±10%	Y5P	10.0	6.0	7.5	P4505A-ND	4.01	28.62	160.29	148.84/M	143.12/M	137.39/M	ECK-D3F561KBP
3K	680pf	±10%	Y5P	11.0	6.0	7.5	P4506A-ND	5.07	37.21	213.79	205.87/M	197.95/M	190.04/M	ECK-D3F681KBP
3K	820pf	±10%	Y5P	11.0	6.0	7.5	P4507A-ND	5.07	37.21	213.79	205.87/M	197.95/M	190.04/M	ECK-D3F821KBP
3K	1000pf	±10%	Y5P	12.5	6.0	7.5	P4508A-ND	5.17	37.97	218.12	210.05/M	201.97/M	193.89/M	ECK-D3F102KBP
3K	1200pf	±10%	Y5P	14.5	6.0	10.0	P4509A-ND	7.80	58.50	345.81	332.82/M	325.02/M	312.02/M	ECK-D3F122KBP
3K	1500pf	±10%	Y5P	14.5	6.0	10.0	P4510A-ND	7.67	57.54	340.12	327.34/M	319.67/M	306.88/M	ECK-D3F152KBP
3K	1800pf</													