

For detailed information on these and other types see Data Handbook C15
For packing information see page C79

Capacitance range	1000 to 47000 pF
Lower tolerance	- 20%
Upper tolerance	+ 80%
Rated d.c. voltage	63 V
Sectional specification	IEC 384-9
Class	2
Climatic category	10/055/21
at norm	IEC 68
Colour code	green

size	W _{max} mm	H _{max} (mm)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
I	3.6	6.3	5.0	4 ± 0.5	> 13
IIB	4.5	7.3	6.0	4 ± 0.5	> 13
IV	6.2	9.0	7.7	4 ± 0.5	> 13
V	6.2	11.2	9.9	4 ± 0.5	> 13

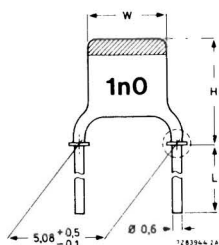


Fig. 1

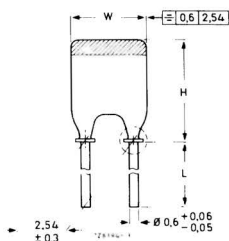


Fig. 2

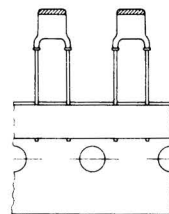


Fig. 3

cap. pF	size	cat.no. lead spacing 0.2" long leads,fig.2 bulk	cat.no. lead spacing 0.2" short leads,fig.1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.1" on tape in ammpack,fig.3
1000	I	2222 629 08102	2222 629 19102	2222 629 53102	2222 629 63102
2200	I	2222 629 08222	2222 629 19222	2222 629 53222	2222 629 63222
4700	I	2222 629 08472	2222 629 19472	2222 629 53472	2222 629 63472
10000	IIB	2222 629 08103	2222 629 19103	2222 629 53103	2222 629 63103
22000	IV	2222 629 08223	2222 629 19223	2222 629 53223	2222 629 63223
47000	V	2222 629 08473	2222 629 19473	2222 629 53473	2222 629 63473



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Capacitance range	180 to 6800 pF
Lower tolerance	- 10%
Upper tolerance	+ 10%
Rated d.c. voltage	100 V
Sectional specification	IEC 384-9/2C2
Class	2
Climatic category	55/085/21
at norm	IEC 68
Colour code	yellow

size	W _{max} mm	H _{max} (r.m.)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
I	3.6	6.3	5.0	4 ± 0.5	√ 13
IIA	3.9	6.7	5.3	4 ± 0.5	√ 13
IIB	4.5	7.3	6.0	4 ± 0.5	√ 13
III	5.1	7.9	6.6	4 ± 0.5	√ 13
IV	6.2	9.0	7.7	4 ± 0.5	√ 13
V	6.2	11.2	9.9	4 ± 0.5	√ 13

For Figs 1, 2 and 3 see page C72.



cap. pF	size	cat.no. lead spacing 0.2" long leads, fig. 2 bulk	cat.no. lead spacing 0.2" short leads, fig. 1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.1" on tape in ammopack, fig. 3
180	I	2222 630 08181	2222 630 19181	2222 630 53181	2222 630 63181
220	I	2222 630 08221	2222 630 19221	2222 630 53221	2222 630 63221
270	I	2222 630 08271	2222 630 19271	2222 630 53271	2222 630 63271
330	I	2222 630 08331	2222 630 19331	2222 630 53331	2222 630 63331
390	I	2222 630 08391	2222 630 19391	2222 630 53391	2222 630 63391
470	I	2222 630 08471	2222 630 19471	2222 630 53471	2222 630 63471
560	I	2222 630 08561	2222 630 19561	2222 630 53561	2222 630 63561
680	I	2222 630 08681	2222 630 19681	2222 630 53681	2222 630 63681
820	I	2222 630 08821	2222 630 19821	2222 630 53821	2222 630 63821
1000	IIA	2222 630 08102	2222 630 19102	2222 630 53102	2222 630 63102
1200	IIA	2222 630 08122	2222 630 19122	2222 630 53122	2222 630 63122
1500	IIB	2222 630 08152	2222 630 19152	2222 630 53152	2222 630 63152
1800	IIB	2222 630 08182	2222 630 19182	2222 630 53182	2222 630 63182
2200	III	2222 630 08222	2222 630 19222	2222 630 53222	2222 630 63222
2700	III	2222 630 08272	2222 630 19272	2222 630 53272	2222 630 63272
3300	IV	2222 630 08332	2222 630 19332	2222 630 53332	2222 630 63332
3900	IV	2222 630 08392	2222 630 19392	2222 630 53392	2222 630 63392
4700	IV	2222 630 08472	2222 630 19472	2222 630 53472	2222 630 63472
5600	V	2222 630 08562	2222 630 19562	2222 630 53562	2222 630 63562
6800	V	2222 630 08682	2222 630 19682	2222 630 53682	2222 630 63682



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Capacitance range	0.56 to 1.5 pF
Lower tolerance	- 0.25 pF
Upper tolerance	+ 0.25 pF
Rated d.c. voltage	100 V
Temperature coefficient	100 x 10 ⁻⁶ /K
Sectional specification	IEC 384-8/1B
Class	1
Climatic category	55/085/21
at norm	IEC 68
Colour code	red-violet

size	W _{max} mm	H _{max} (mm)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
I	3.6	6.3	5.0	4 ± 0.5	> 13

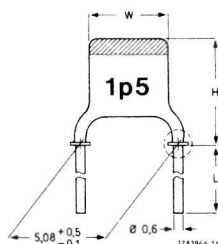


Fig. 1

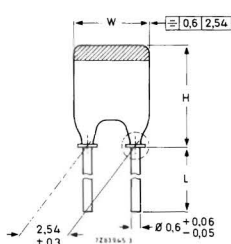


Fig. 2

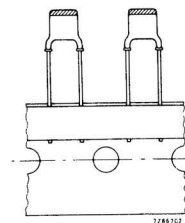


Fig. 3

cap. pF	tolerance ± pF	size	cat.no. lead spacing 0.1" long leads, fig. 2 bulk	cat.no. lead spacing 0.2" short leads, fig. 1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.2" in ammpack fig. 3
0.56	0.25	I	2222 680 03567	2222 683 03567	2222 679 03567	2222 689 03567
0.68	0.25	I	2222 680 03687	2222 683 03687	2222 679 03687	2222 689 03687
0.82	0.25	I	2222 680 03827	2222 683 03827	2222 679 03827	2222 689 03827
1	0.25	I	2222 680 03108	2222 683 03108	2222 679 03108	2222 689 03108
1.2	0.25	I	2222 680 03128	2222 683 03128	2222 679 03128	2222 689 03128
1.5	0.25	I	2222 680 03158	2222 683 03158	2222 679 03158	2222 689 03158



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Capacitance range	1.8 to 220 pF	Sectional specification	IEC 384-8, class 1B
Tolerance	± 2% or ± 0.25 pF	Climatic category, IEC 68	55/085/21
Rated d.c. voltage	100 V	Colour code	black
Temperature coefficient	NPO (0 x 10 ⁻⁶ /K)		

size	W _{max} mm	H _{max} (mm)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
I	3.6	6.3	5.0	4 ± 0.5	≥ 13
IIA	3.9	6.7	5.3	4 ± 0.5	≥ 13
IIB	4.5	7.3	6.0	4 ± 0.5	≥ 13
III	5.1	7.9	6.6	4 ± 0.5	≥ 13
IV	6.2	9	7.7	4 ± 0.5	≥ 13
V	6.2	11.2	9.9	4 ± 0.5	≥ 13

For drawing see next page.

cap. pF	tolerance ± pF/%	size	cat.no. lead spacing 0.1" long leads, fig. 2 bulk	cat.no. lead spacing 0.2" short leads, fig. 1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.2" in ammpack fig. 3
1.8	0.25	I	2222 680 09188	2222 683 09188	2222 679 09188	2222 689 09188
2.2	0.25	I	2222 680 09228	2222 683 09228	2222 679 09228	2222 689 09228
2.7	0.25	I	2222 680 09278	2222 683 09278	2222 679 09278	2222 689 09278
3.3	0.25	I	2222 680 09338	2222 683 09338	2222 679 09338	2222 689 09338
4.7	0.25	I	2222 680 09478	2222 683 09478	2222 679 09478	2222 689 09478
5.6	0.25	I	2222 680 09568	2222 683 09568	2222 679 09568	2222 689 09568
6.8	0.25	I	2222 680 09688	2222 683 09688	2222 679 09688	2222 689 09688
8.2	0.25	I	2222 680 09828	2222 683 09828	2222 679 09828	2222 689 09828
10	2%	I	2222 680 10109	2222 683 10109	2222 679 10109	2222 689 10109
12	2%	I	2222 680 10129	2222 683 10129	2222 679 10129	2222 689 10129
15	2%	I	2222 680 10159	2222 683 10159	2222 679 10159	2222 689 10159
18	2%	I	2222 680 10189	2222 683 10189	2222 679 10189	2222 689 10189
22	2%	I	2222 680 10229	2222 683 10229	2222 679 10229	2222 689 10229
27	2%	I	2222 680 10279	2222 683 10279	2222 679 10279	2222 689 10279
33	2%	I	2222 680 10339	2222 683 10339	2222 679 10339	2222 689 10339
39	2%	IIA	2222 680 10399	2222 683 10399	2222 679 10399	2222 689 10399
47	2%	IIA	2222 680 10479	2222 683 10479	2222 679 10479	2222 689 10479
56	2%	IIB	2222 680 10569	2222 683 10569	2222 679 10569	2222 689 10569
68	2%	IIB	2222 680 10689	2222 683 10689	2222 679 10689	2222 689 10689
82	2%	IIB	2222 680 10829	2222 683 10829	2222 679 10829	2222 689 10829
100	2%	III	2222 680 10101	2222 683 10101	2222 679 10101	2222 689 10101
120	2%	III	2222 680 10121	2222 683 10121	2222 679 10121	2222 689 10121
150	2%	IV	2222 680 10151	2222 683 10151	2222 679 10151	2222 689 10151
180	2%	IV	2222 680 10181	2222 683 10181	2222 679 10181	2222 689 10181
220	2%	V	2222 680 10221	2222 683 10221	2222 679 10221	2222 689 10221

**PHILIPS**

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Capacitance range 3.9 to 150 pF
 Tolerance $\pm 2\%$ or ± 0.25 pF
 Rated d.c. voltage 100 V
 Temperature coefficient N150 ($-150 \times 10^{-6}/K$)

Sectional specification
 Climatic category, IEC 68
 Colour code

IEC 384-8, class 1B
 55/085/21
 orange

size	$W_{\max}$ mm	$H_{\max}$ (mm)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
I	3.6	6.3	5.0	4 ± 0.5	> 13
IIA	3.9	6.7	5.3	4 ± 0.5	> 13
IIB	4.5	7.3	6.0	4 ± 0.5	> 13
III	5.1	7.9	6.6	4 ± 0.5	> 13
IV	6.2	9.0	7.7	4 ± 0.5	> 13

Fig. 1

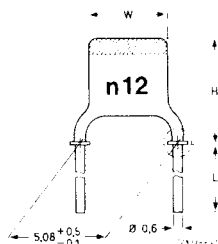


Fig. 2

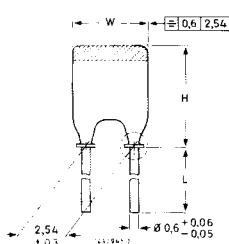
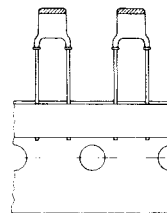


Fig. 3



cap. pF	tolerance $\pm$ pF/%	size	cat.no. lead spacing 0.1" long leads, fig. 2 bulk	cat.no. lead spacing 0.2" short leads, fig. 1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.2" in ammpack fig. 3
3.9	0.25	I	2222 680 33398	2222 683 33398	2222 679 33398	2222 689 33398
4.7	0.25	I	2222 680 33478	2222 683 33478	2222 679 33478	2222 689 33478
5.6	0.25	I	2222 680 33568	2222 683 33568	2222 679 33568	2222 689 33568
6.8	0.25	I	2222 680 33688	2222 683 33688	2222 679 33688	2222 689 33688
8.2	0.25	I	2222 680 33828	2222 683 33828	2222 679 33828	2222 689 33828
10	2%	I	2222 680 34109	2222 683 34109	2222 679 34109	2222 689 34109
12	2%	I	2222 680 34129	2222 683 34129	2222 679 34129	2222 689 34129
15	2%	I	2222 680 34159	2222 683 34159	2222 679 34159	2222 689 34159
18	2%	I	2222 680 34189	2222 683 34189	2222 679 34189	2222 689 34189
22	2%	I	2222 680 34229	2222 683 34229	2222 679 34229	2222 689 34229
27	2%	I	2222 680 34279	2222 683 34279	2222 679 34279	2222 689 34279
33	2%	I	2222 680 34339	2222 683 34339	2222 679 34339	2222 689 34339
39	2%	IIA	2222 680 34399	2222 683 34399	2222 679 34399	2222 689 34399
47	2%	IIA	2222 680 34479	2222 683 34479	2222 679 34479	2222 689 34479
56	2%	IIB	2222 680 34569	2222 683 34569	2222 679 34569	2222 689 34569
68	2%	IIB	2222 680 34689	2222 683 34689	2222 679 34689	2222 689 34689
82	2%	III	2222 680 34829	2222 683 34829	2222 679 34829	2222 689 34829
100	2%	III	2222 680 34101	2222 683 34101	2222 679 34101	2222 689 34101
120	2%	IV	2222 680 34121	2222 683 34121	2222 679 34121	2222 689 34121
150	2%	IV	2222 680 34151	2222 683 34151	2222 679 34151	2222 689 34151

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For details on these and other types see Data Handbook C15
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Capacitance range	3.9 to 330 pF
Tolerance	$\pm 2\%$ or ± 0.25 pF
Rated d.c. voltage	100 V
Temperature coefficient	N750 ($-750 \times 10^{-6}/K$)
Sectional specification	IEC 384-8, class 1B
Climatic category, IEC 68	55/085/21
Colour code	violet

size	W _{max} mm	H _{max} (mm)		L (mm)	
		fig. 1	fig. 2	long leads	short leads
I	3.6	6.3	5.0	4 $\pm$ 0.5	> 13
IIA	3.9	6.7	5.3	4 $\pm$ 0.5	> 13
IIB	4.5	7.3	6.0	4 $\pm$ 0.5	> 13
III	5.1	7.9	6.6	4 $\pm$ 0.5	> 13
IV	6.2	9.0	7.7	4 $\pm$ 0.5	> 13
V	6.2	11.2	9.9	4 $\pm$ 0.5	> 13

For drawing see next page.

cap. pF	tolerance $\pm$ pF/%	size	cat. number lead spacing 0.1" long leads, fig. 2, bulk packing	cat. number lead spacing 0.2" short leads, fig. 1, bulk packing	cat. number lead spacing 0.2" on tape/reel, fig. 3	cat. number lead spacing 0.2" on tape in ammpack fig. 3
3.9	0.25	I	2222 680 57398	2222 683 57398	2222 679 57398	2222 689 57398
4.7	0.25	I	2222 680 57478	2222 683 57478	2222 679 57478	2222 689 57478
5.6	0.25	I	2222 680 57568	2222 683 57568	2222 679 57568	2222 689 57568
6.8	0.25	I	2222 680 57688	2222 683 57688	2222 679 57688	2222 689 57688
8.2	0.25	I	2222 680 57828	2222 683 57828	2222 679 57828	2222 689 57828
10	2%	I	2222 680 58109	2222 683 58109	2222 679 58109	2222 689 58109
12	2%	I	2222 680 58129	2222 683 58129	2222 679 58129	2222 689 58129
15	2%	I	2222 680 58159	2222 683 58159	2222 679 58159	2222 689 58159
18	2%	I	2222 680 58189	2222 683 58189	2222 679 58189	2222 689 58189
22	2%	I	2222 680 58229	2222 683 58229	2222 679 58229	2222 689 58229
27	2%	I	2222 680 58279	2222 683 58279	2222 679 58279	2222 689 58279
33	2%	I	2222 680 58339	2222 683 58339	2222 679 58339	2222 689 58339
39	2%	I	2222 680 58399	2222 683 58399	2222 679 58399	2222 689 58399
47	2%	I	2222 680 58479	2222 683 58479	2222 679 58479	2222 689 58479
56	2%	I	2222 680 58569	2222 683 58569	2222 679 58569	2222 689 58569
68	2%	I	2222 680 58689	2222 683 58689	2222 679 58689	2222 689 58689
82	2%	I	2222 680 58829	2222 683 58829	2222 679 58829	2222 689 58829
100	2%	I	2222 680 58101	2222 683 58101	2222 679 58101	2222 689 58101
120	2%	I	2222 680 58121	2222 683 58121	2222 679 58121	2222 689 58121
150	2%	I	2222 680 58151	2222 683 58151	2222 679 58151	2222 689 58151
180	2%	I	2222 680 58181	2222 683 58181	2222 679 58181	2222 689 58181
220	2%	I	2222 680 58221	2222 683 58221	2222 679 58221	2222 689 58221
270	2%	I	2222 680 58271	2222 683 58271	2222 679 58271	2222 689 58271
330	2%	I	2222 680 58331	2222 683 58331	2222 679 58331	2222 689 58331



MINIATURE CERAMIC CAPACITORS (cont.)

General data

2222 680/683/679/689 (N1500)

For detailed information on these and other types see Data Handbook C15
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Capacitance range	390 to 560 pF
Tolerance	± 2%
Rated d.c. voltage	100 V
Temperature coefficient	N1500 (−1500 × 10 ^{−6} /K)
Sectional specification	IEC 384–8, class 1B
Climatic category, IEC 68	55/085/21
Colour code	orange/orange

size	W _{max} mm	H _{max} (mm)		L (mm)	
		fig. 1	fig. 2	short leads	long leads
IV	6.2	9.0	7.7	4 ± 0.5	> 13
V	6.2	11.2	8.9	4 ± 0.5	> 13

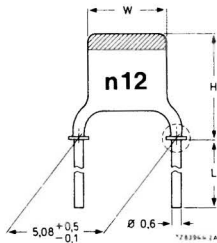


Fig. 1

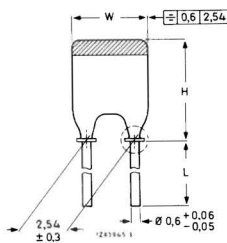


Fig. 2

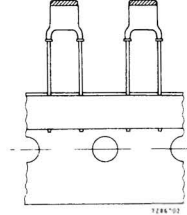


Fig. 3

cap. pF	tolerance ± %	size	cat.no. lead spacing 0.1" long leads, fig. 2 bulk	cat.no. lead spacing 0.2" short leads, fig. 1 bulk	cat.no. lead spacing 0.2" on tape on reel fig. 3	cat.no. lead spacing 0.2" in ammpack fig. 3
390	2%	IV	2222 680 70391	2222 683 70391	2222 679 70391	2222 689 70391
470	2%	V	2222 680 70471	2222 683 70471	2222 679 70471	2222 689 70471
560	2%	V	2222 680 70561	2222 683 70561	2222 679 70561	2222 689 70561



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