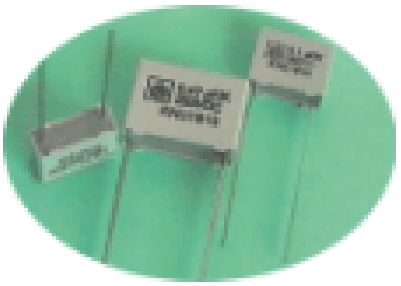
Capacitors: Type KNU 1910

radial leads, pitch 10mm to 27.5mm

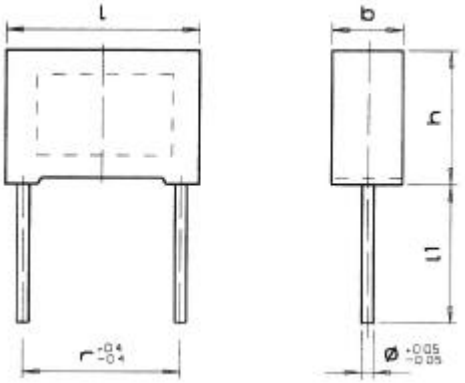


Technical data

General technical data

Dielectric:	polypropylene film
Electrodes:	vacuum metallized on dielectric
Winding:	non-inductive construction, flat shape
Leads:	tinned copper wire, standard lengths l_1: $4^{\pm 0.5}$; 6^{-1}; $25^{\pm 5}$. Other lead lengths on request.
Encapsulation:	flame-retardant plastic case with flame-retardant epoxy resin seal, UL94 V-0, resistant to wash in hallogenated solvents
Marking:	Iskra symbol, capacitance, tolerance, rated voltage, type designation
Climatic category:	55/100/56, IEC 60068-1
Temperature range:	-55^0C to + 100^0C
Complies with standard:	IEC 60384-16

Dimensions in mm



Diameter of leads

r (mm)	ϕ (mm)
10	0.6
15; 22.5; 27.5	0.8

Electrical data

Capacitance range:	1000 pF to 6.8 µF
Standard values of capacitance (C_R):	range E6
Capacitance tolerance:	±20% (M); ±10% (K) and ±5% (J) on special request
Temperature coefficient of capacitance (TC):	appr. $-200x10^{-6}/^0$C
Rated voltage (U_R):	250 V DC, 400 V DC, 630 V DC, 1000 V DC, 1600 V DC
Allowed alternative voltage up to 60 Hz:	160 V AC, 220 V AC, 250 V AC, 300 V AC, 500 V AC
Category voltage (U_C):	up to +85^{0}C $U_C=U_R$; from +85^{0}C to +100^{0}C voltage U_R is lowered for 1.35% per 1^{0}C.
Test vollage:	1.6 x U_R, 2 s
Dissipation factor (tan δ):	

	$C_R \leq 0.1$ µF	0.1 µF < $C_R \leq 1$ µF	$C_R > 1$ µF
f = 1 kHz	$\leq 5 \times 10^{-4}$	$\leq 5 \times 10^{-4}$	$\leq 5 \times 10^{-4}$
f = 10 kHz	$\leq 10 \times 10^{-4}$	$\leq 20 \times 10^{-4}$	-
f =100 kHz	$\leq 30 \times 10^{-4}$	-	-

Insulation resistance (R_i):	≥ 100 000 MΩ at 20^{0}C for $C_R \leq 0.33$ µF $R_i \times C_R \geq 30\,000$ s at 20^{0}C for $C_R > 0.33$ µF
Self inductance:	appr. 10 nH/cm length of capacitor and leads
Soldering on printed circuit boards:	temperature of soldering bath 270^{0}C max., soldering time 5 s max.

Pulse loading (du/dt):

U_R	Pitch r (mm)			
	10	15	22.5	27.5
	Allowed pulse loading (V/µs)			
250 V DC	180	120	60	45
400 V DC	200	150	90	65
630 V DC	230	180	120	90
1000 V DC	-	210	130	100
1600 V DC	-	450	190	140

Type KNU 1910

Dimensional data:

Capacitance	Rated voltage U_R																			
	250 V DC				400 V DC				630 V DC				1000 V DC				1600 V DC			
	l max.	h max.	b max.	r	l max.	h max.	b max.	r	l max.	h max.	b max.	r	l max.	h max.	b max.	r	l max.	h max.	b max.	r
(µF)	(mm)				(mm)				(mm)				(mm)				(mm)			
0.001																	18	11	5	15
0.0015																	18	11	5	15
0.0022																	18	11	5	15
0.0033																	18	11	5	15
0.0047									13	9	4	10					18	11	5	15
0.0068									13	9	4	10					18	11	5	15
0.01					13	9	4	10	13	9	4	10	18	11	5	15	18	11	5,5	15
0.015					13	9	4	10	13	9,5	4,3	10	18	11	5	15	18	13	7	15
0.022	13	9	4	10	13	9	4	10	13	10,5	5	10	18	11	5	15	18	14,5	8,5	15
0.033	13	9	4	10	13	9,5	4,3	10	13	11,5	6	10	18	11	5,5	15	26,5	15	6	22,5
0.047	13	9	4	10	13	10,5	5	10	18	11	5	15	18	13	7	15	26,5	16	7	22,5
0.068	13	9,5	4,3	10	13	11,5	6	10	18	11	5,5	15	18	13,5	7,5	15	26,5	18,5	9	22,5
0.1	13	10,5	5	10	18	11	5	15	18	13	7	15	26,5	15	6	22,5	26,5	20,5	11	22,5
0.15	13	11,5	6	10	18	11	5,5	15	18	14,5	8,5	15	26,5	16,5	7,5	22,5	31,5	21	12	27,5
0.22	18	11	5	15	18	13	7	15	26,5	15	6	22,5	26,5	18,5	9	22,5	31,5	23,5	14	27,5
0.33	18	12	6	15	18	14,5	8,5	15	26,5	16,5	7,5	22,5	31,5	19	10	27,5	31,5	26,5	17	27,5
0.47	18	13	7	15	26,5	16	7	22,5	26,5	18,5	9	22,5	31,5	21	12	27,5				
0.68	18	14,5	9	15	26,5	17	8,5	22,5	26,5	20,5	11	22,5	31,5	23,5	14	27,5				
1	26,5	15	6	22,5	26,5	18,5	10	22,5	31,5	21	12	27,5	31,5	26,5	17	27,5				
1.5	26,5	17	8,5	22,5	31,5	19	10	27,5												
2.2	26,5	20,5	11	22,5	31,5	23,5	14	27,5												
3.3	31,5	21	12	27,5																
4.7	31,5	23,5	14	27,5																
6.8	31,5	26,5	17	27,5																

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