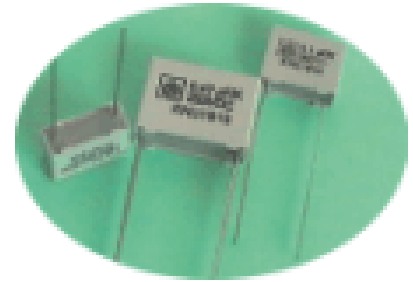


**Capacitors: Type KNU 1910**

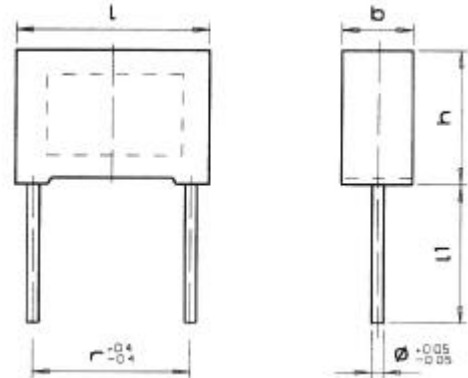
radial leads, pitch 10mm to 27.5mm

**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 halogenated solvents  
**Marking:** Iskra symbol, capacitance, tolerance, rated voltage, type designation  
**Climatic category:** 55/100/56, IEC 60068-1  
**Temperature range:**  $-55^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$   
**Complies with standard:** IEC 60384-16



Dimensions in mm



Diameter of leads

r (mm)	$\phi$ (mm)
10	0.6
15; 22.5; 27.5	0.8

**Electrical data**

**Capacitance range:** 1000 pF to 6.8  $\mu\text{F}$   
**Standard values of capacitance ( $C_R$ ):** range E6  
**Capacitance tolerance:**  $\pm 20\%$  (M);  $\pm 10\%$  (K) and  $\pm 5\%$  (J) on special request  
**Temperature coefficient of capacitance (TC):** appr.  $-200 \times 10^{-6}/^{\circ}\text{C}$   
**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  $+85^{\circ}\text{C}$   $U_C = U_R$ ; from  $+85^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$  voltage  $U_R$  is lowered for 1.35% per  $1^{\circ}\text{C}$ .  
**Test voltage:**  $1.6 \times U_R, 2 \text{ s}$   
**Dissipation factor ( $\tan \delta$ ):**

	$C_R \leq 0.1 \mu\text{F}$	$0.1 \mu\text{F} < C_R \leq 1 \mu\text{F}$	$C_R > 1 \mu\text{F}$
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 ( $R_i$ ):**  $\geq 100\,000 \text{ M}\Omega$  at  $20^{\circ}\text{C}$  for  $C_R \leq 0.33 \mu\text{F}$   
 $R_i \times C_R \geq 30\,000 \text{ s}$  at  $20^{\circ}\text{C}$  for  $C_R > 0.33 \mu\text{F}$   
**Self inductance:** appr. 10 nH/cm length of capacitor and leads  
**Soldering on printed circuit boards:** temperature of soldering bath  $270^{\circ}\text{C}$  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/ $\mu\text{s}$ )			
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 (μF)	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
	(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																