

Capacitors: Type KNU 1910

radial leads, pitch 10mm to 27.5mm

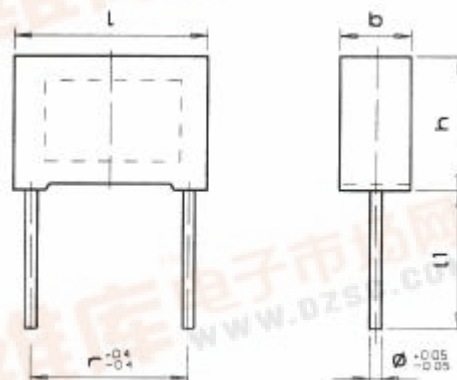
Technical data

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°C to $+100^{\circ}\text{C}$
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: $\pm 20\%$ (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°C .
Test voltage: $1.6 \times U_R$, 2 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°C for $C_R \leq 0.33 \mu\text{F}$

$R_i \times C_R \geq 30\,000 \text{ s}$ at 20°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°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:

Capaci- tance (μF)	Rated voltage U _R														
	250 V DC				400 V DC				630 V DC				1000 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.
	(mm)				(mm)				(mm)				(mm)		
0.001															
0.0015															
0.0022															
0.0033															
0.0047									13	9	4	10			
0.0068									13	9	4	10			
0.01					13	9	4	10	13	9	4	10	18	11	5
0.015					13	9	4	10	13	9,5	4,3	10	18	11	5
0.022	13	9	4	10	13	9	4	10	13	10,5	5	10	18	11	5
0.033	13	9	4	10	13	9,5	4,3	10	13	11,5	6	10	18	11	5,5
0.047	13	9	4	10	13	10,5	5	10	18	11	5	15	18	13	7
0.068	13	9,5	4,3	10	13	11,5	6	10	18	11	5,5	15	18	13,5	7,5
0.1	13	10,5	5	10	18	11	5	15	18	13	7	15	26,5	15	6
0.15	13	11,5	6	10	18	11	5,5	15	18	14,5	8,5	15	26,5	16,5	7,5
0.22	18	11	5	15	18	13	7	15	26,5	15	6	22,5	26,5	18,5	9
0.33	18	12	6	15	18	14,5	8,5	15	26,5	16,5	7,5	22,5	31,5	19	10
0.47	18	13	7	15	26,5	16	7	22,5	26,5	18,5	9	22,5	31,5	21	12
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
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
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											