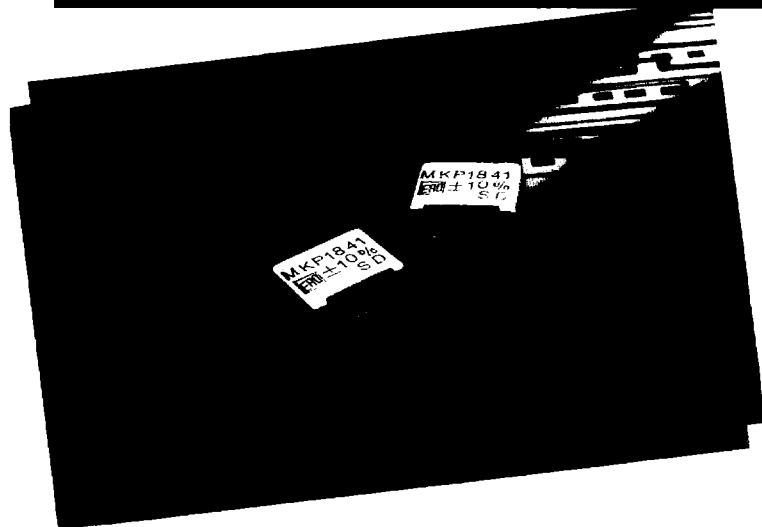


SERIES 1841 MINI



Physical

Dielectric Material	• polypropylene (metallized)
Electrode Material	• metallized carrier
Winding Construction	• non-inductive, extended metallized carrier, (160-400 VDC), 2X series with carrier, (630-2000 VDC)
Lead Material	• tinned wire
Enclosure	• Blue, flame retardant (UL94V0) case with epoxy endseal
Component Marking	• Logo, type, capacitance value, tolerance, rated voltage, and date code
Temperature Range	• -55° C to 85° C, to 100° C with a voltage derating of 1.25 % per degree C
Temperature Coef.	• -250 ppm/°C (typical)

Electrical

Capacitance Range	• 1000pfd to 4.7 mfd @ 1KHz
Tolerance	• ± 5 %, ± 10 %, ± 20 % (J,K,M)
Voltage Range	• 160 VDC to 2000 VDC
Self Inductance	• 6nH (2mm lead length)
Dissipation Factor	• ≤ .03 % @ 1KHz • ≤ .04 % @ 10KHz, C ≤ 1.0mfd
Dielectric Strength	• 1.6 x Rated VDC

Capacitance Drift

±1.0 % over two years at a temperature of between 20° C and 40° C and a RH of between 40 % and 60 %.

Reliability

5 FIT = 5×10^{-9} failures/component hour
= 5 ppm / 1000 component hour

Radial Leaded Capacitors

Metallized Polypropylene Dielectric - MKP

Preformed Case with Epoxy Endfill

Insulation Resistance	
MegOhms x MicroFarads	≥ 30,000
Need Not Exceed (MegOhms)	100,000
Test Voltage	100 VDC

Measured after 1 minute of electrification.

dv/dt	Capacitor pcm (mm)					
Rated Voltage	7.5	10.0	15.0	22.5	27.5	37.5
	Maximum Volts/microsecond					
160	1800	820	410	260	202	140
250	2200	1140	580	320	240	120
400	3600	1840	910	520	400	280
630			3430	2120	1524	980
1000			6600	2800	2000	1280
1600			11100	3800	2680	1690
2000				6200	4200	2600

At rated voltage @ 25° C.

Performance Testing: Life

Test Conditions

Temperature	• 85° C ± 3° C
Applied Voltage	• 1.25 x rated voltage
Test Duration	• 2000 hours

Performance Requirements

Capacitance	• delta of ≤ 3 %
Dissipation Factor	• delta of ≤ 1 % @ 1KHz
Insulation Resistance	• ≤ 50 % of initial limit

Humidity

Test Conditions

Temperature	• 40° C ± 2° C
Applied Voltage	• zero volts
Humidity	• 93 % ± 2 % RH
Test Duration	• 56 days

Performance Requirements

Capacitance	• delta of ≤ 3 %
Dissipation Factor	• delta of ≤ 1 % @ 1KHz
Insulation Resistance	• ≥ 50 % of initial limit

Solderability

Test Conditions

Solder Temperature	• 260° C ± 5° C
Test Duration	• 10 seconds ± 1 second

Performance Requirements

Capacitance	• delta of ≤ 1 %
-------------	------------------

Suggested Applications:

Coupling/Decoupling (High Frequency)

Deflection Circuits (S correction)

Pulse Operations

Sample & Hold Circuits

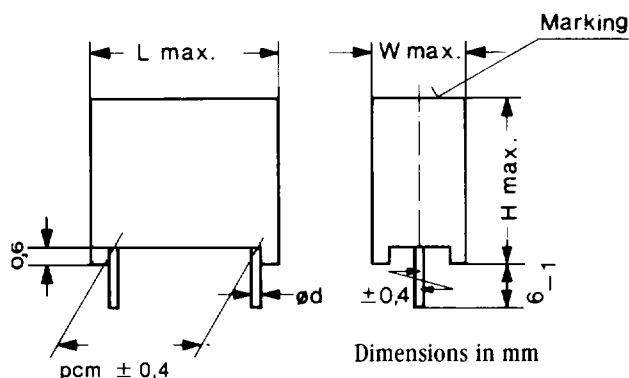
Timing

SERIES 1841 MINI*

Radial Leaded Capacitors

Metallized Polypropylene Dielectric - MKP

Preformed Case with Epoxy Endfill



Ordering Code Sequence:

Example: .1mfd 250VDC $\pm 10\%$

MKP 1841M 410 25 5

Type _____

Series Number _____

Capacitance Code _____

Voltage Code _____

Tolerance Code _____

20 % = 6

10 % = 5

5 % = 4

Capacitance	Capacitance Code	Code 25				Code 63*			
		250VDC/160VAC*				630VDC/250VAC*			
		W	H	L	pcm	W	H	L	pcm
1000 pF	-210					3.5	8.0	13	10
1500 pF	-215					3.5	8.0	13	10
2200 pF	-222					3.5	8.0	13	10
3300 pF	-233					3.5	8.0	13	10
4700 pF	-247					4.0	9.0	13	10
6800 pF	-268					4.5	9.5	13	10
0.01 μ F	-310					5.5	10.5	13	10
0.015 μ F	-315					6.5	11.5	13	10
0.022 μ F	-322	4.5	9.5	13	10				
0.033 μ F	-333	5.5	10.5	13	10	630VDC/250VAC series not suitable for across-the-line applications.			
0.047 μ F	-347	6.5	11.5	13	10				
0.068 μ F	-368	5.5	10.5	18	15				
0.1 μ F	-410	6.5	12.5	18	15				
0.15 μ F	-415	7.5	13.5	18	15				
0.22 μ F	-422	8.5	17.5	18	15				
0.33 μ F	-433	8.5	16.5	26.5	22.5				
0.47 μ F	-447	10.5	18.5	26.5	22.5				
0.68 μ F	-468	11.0	21.0	26.5	22.5				
1.0 μ F	-510	11.5	20.5	31.5	27.5				
1.5 μ F	-515	15.0	24.5	31.5	27.5				
2.2 μ F	-522	16.5	29.5	31.5	27.5				
3.3 μ F	-533	20.0	35.0	31.5	27.5				
4.7 μ F	-547	20.0	40.0	42.5	37.5				

Further C-values on request.

*MKP 1841 with reduced dimensions (-H version).

