

Metallized Polyester Capacitors

A-05-17-05

I 5150-

I 5154

SIEMENS AKTIENGESELLSCHAFT 47E D

Stacked layer construction. Self-healing capacitor with polyester as dielectric. Epoxy resin dipped. Radial tinned copper leads.

Ordering code

Example: 0.47 / 10 / 100 / 515x

Rated
capacitance

Tolerance

Rated Voltage (U_R)

Code

0 = L.S. 7.5 mm

1 = L.S. 10 mm

2 = L.S. 15 mm

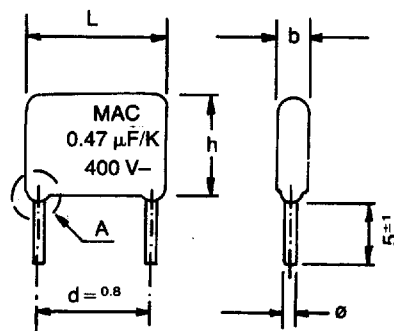
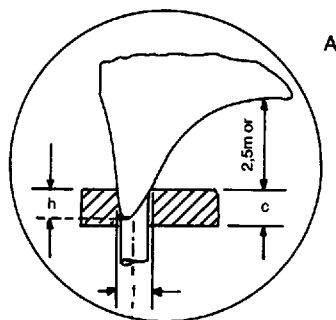
3 = L.S. 22.5 mm

4 = L.S. 27.5 mm

d (mm)	ϕ (mm)	L (mm)
7.5	0.6	11
10	0.8	13
15	0.8	18

*15mm available under request

Detail of meniscus:



PC Board Thickness	C = 1 mm	C = 1.5 mm
Hole Diameter	F = 1 mm	F = 1.5 mm
Maximum penetration	$h \leq 0.8$ mm	$h \leq 1.3$ mm

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Technical Data:

Climatic category in accordance with DIN 40040	G – minimum category temperature – 40C M – maximum category temperature + 100C F – average relative humidity (RH) ≤65% 60 days per year 75% 30 days per year 85%			
Damp heat test in accordance with DIN 40046 and IEC 384-2	Conditions: Test temperature (40±2)C Relative humidity (92±3)% Test duration 21 days After test: R _{ins} ≤ 50% of the minimum value at delivery ΔC C ≤ 5% Δtgδ at 1 kHz ≤ 5 x 10 ⁻³ 40/100/21			
Solder conditions	Temperature solder bath: max. 260°C Solder duration: 5 s Distance to the soldering joint: min. 6 mm.			
Self inductance	lead space (mm)	7.5	10	15
	Self inductance (nH)	5	6	7
Dissipation factor tg δ (measured at 20°C) 1 kHz 10 kHz	Maximum limit value	Average value		
	10.10 ⁻³	5.10 ⁻³		
	20.10 ⁻³	15.10 ⁻³		
Capacitance drift i _z	± 3%			

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 MKT Capacitors - Epoxy Coated

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Lead spacing		LS 27.5mm			
Rated dc voltage		100V	250V	400V	630V
Rated capacitance		Maximum Dimensions b x h x l (mm)			
CR	Tolerance	5154 -			
0.01	μF				
0.015	μF				
0.022	μF				
0.033	μF				
0.047	μF				
0.068	μF				
0.1	μF				
0.15	μF				
0.22	μF				
0.33	μF	± 20% M ± 10% K ± 5% J			10.0x23.5x31.0
0.47	μF				12.0x25.5x31.0
0.68	μF			11.0x23.5x31.0	
1	μF			13.0x24.5x31.0	
1.5	μF		9.0x22.5x31.0		
2.2	μF		10.5x24.5x31.0		
3.3	μF		14.0x26.5x31.0		
4.7	μF		13.0x21.5x31.0		
6.8	μF		14.0x23.5x31.0		

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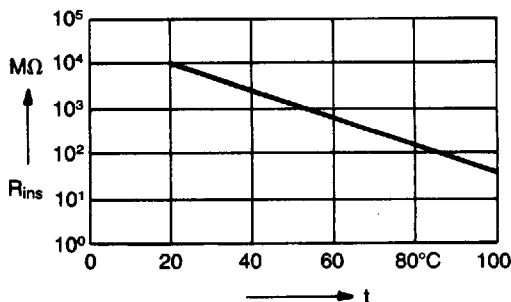
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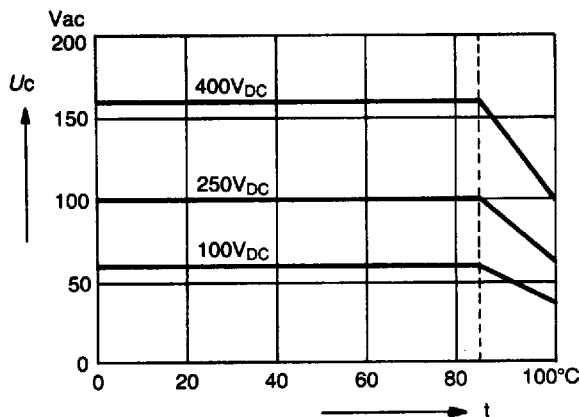
Insulation resistance
as a function of temperature
(Typical values, measured at 25°C)

U_R	$C \leq 0.33 \mu F$	$C > 0.33 \mu F$
100 V	$> 15000 M\Omega$	5000 s
250 V		
400 V	$> 30000 M\Omega$	$> 10000 s$



Category voltage U_c
at ac/dc operation
as a function of temperature t
(50 Hz ac operation)

max. 2000 hours $1.25 \times U_c$



Reversible capacitance change $\frac{\Delta C}{C}$
as a function of temperature at 1 kHz
(Typical values)

