

# CQ92M, SCQ92M

- Polyester film/foil capacitor
- According to IEC 60384-11

## TYPICAL APPLICATIONS

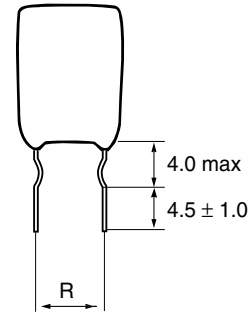
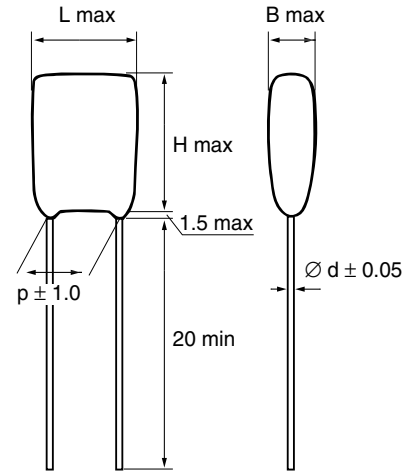
Coupling and decoupling.

## CONSTRUCTION

Capacitor with polyester film and metal foil electrodes. Radial leads of tinned wire are electrically welded to the electrodes. Coated with epoxy resin.

## TECHNICAL DATA

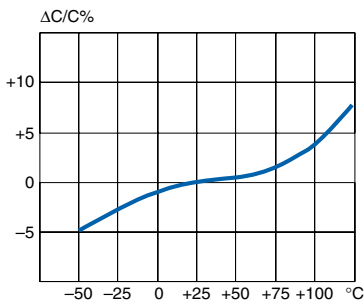
<b>Rated voltage <math>U_R</math>, VDC</b>		50	100	250
<b>Rated voltage <math>U_R</math>, VAC</b>		30	63	160
<b>Capacitance, <math>\mu\text{F}</math></b>	<b>CQ:</b>	0.001 -0.47	0.001 -0.47	0.001 -0.1
	<b>SCQ:</b>	0.001 -0.47		
<b>Capacitance tolerance</b>		$\pm 10\%$ , $\pm 5\%$		
<b>Temperature range</b>		-40 ... +85°C		
<b>Climatic category</b>		IEC 60068-1, 40/085/21 DIN 40040, GPD		
<b>Test voltage</b>		2.5 x $U_R$ VDC for 2s		
<b>Dissipation factor, <math>\tan\delta</math></b>		at +20°C: $\tan\delta \leq 0.8\%$ at 1 kHz.		
<b>Insulation resistance</b>		Measured at +20°C, according to IEC 60384-11.		
		Minimum values between terminals: 30 000 M $\Omega$ C $\leq$ 0.33 $\mu\text{F}$ 10 000 M $\Omega$ C > 0.33 $\mu\text{F}$		



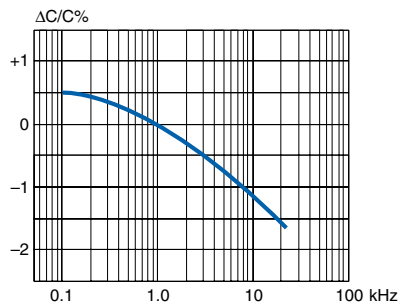
### Lead diameter

<b>SCQ92M:</b>	d = 0.5 mm for C $\leq$ 0.22 $\mu\text{F}$ and d = 0.6 mm for C > 0.22 $\mu\text{F}$
<b>CQ92M:</b>	d = 0.5 mm for C $\leq$ 0.12 $\mu\text{F}$ and d = 0.6 mm for C > 0.12 $\mu\text{F}$

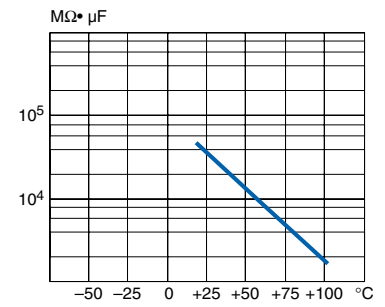
## TYPICAL DATA



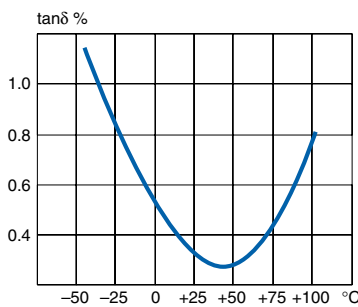
Capacitance vs.  
temperature (at 1 kHz)



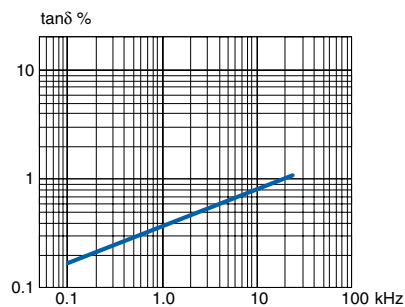
Capacitance vs.  
frequency (at +23°C)



Insulation resistance vs.  
temperature



Dissipation factor vs.  
temperature



Dissipation factor vs.  
frequency (at +23°C)

## ENVIRONMENTAL TEST DATA

<b>Damp heat test</b>	<b>Test conditions:</b> <b>Test criteria:</b>	T = +40°C, RH = 93%, t = 21 days. Δ C/C ≤ 5%, tanδ after test ≤ 1.0% (1kHz) IR after test 9000 MΩ.
<b>Endurance test</b>	<b>Test conditions:</b> <b>Test criteria:</b>	T = +85°C, U = 1.4 × U <sub>R</sub> , t = 1000 h. Δ C/C ≤ 5%, tanδ ≤ 1.0% (1kHz) IR after test 5000 MΩ.

## ORDERING INFORMATION

See article table and pages 18 to 23 for options and article code construction.

## MARKING

## CQ92M

- Capacitance
- Tolerance
- Rated voltage

## SCQ92M

- Capacitance
- Tolerance
- An underline under the tolerance indicates that the capacitor is rated 50V.

## ARTICLE TABLE CQ92M

Capacitance $\mu\text{F}$	Max dimensions in mm					Quantity per package		Article code
	B	H	L	p	R	Bulk	Ammo	
<b>50 VDC/30 VAC &amp; 100VDC/63 VAC</b>								
0.0010	3.0	11.0	5.6	3.5	5.0	1000	2000	CQ92M 102K100 TA16
0.0015	3.0	11.0	5.6	3.5	5.0	1000	2000	CQ92M 152K100 TA16
0.0022	3.0	11.0	5.6	3.5	5.0	1000	2000	CQ92M 222K100 TA16
0.0033	3.0	11.0	5.6	3.5	5.0	1000	2000	CQ92M 332K100 TA16
0.0047	3.0	11.0	5.6	3.5	5.0	1000	2000	CQ92M 472K100 TA16
0.0068	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 682K100 TA16
0.010	3.5	12.0	6.5	3.5	5.0	1000	2000	CQ92M 103K100 TA16
0.015	3.5	13.0	6.5	4.0	5.0	1000	2000	CQ92M 153K100 TA16
0.022	4.0	13.0	7.0	5.0	5.0	1000	2000	CQ92M 223K100 TA16
0.033	4.5	13.5	8.0	5.0	5.0	1000	2000	CQ92M 333K100 TA16
0.047	4.5	14.0	9.0	5.0	5.0	1000	1000	CQ92M 473K100 TA16
0.068	5.0	14.0	10.0	7.5	5.0	500	1000	CQ92M 683K100 TA16
0.10	6.0	14.0	11.0	7.5	5.0	500	1000	CQ92M 104K100 TA16
0.15	7.0	17.0	12.0	7.5	5.0	500		CQ92M 154K100
0.22	8.0	18.0	13.5	10.0	5.0	500		CQ92M 224K100
0.33	8.5	21.0	15.0	10.0	7.5	500		CQ92M 334K100
0.47	10.0	21.0	18.0	10.0	7.5	500		CQ92M 474K100

## 250 VDC/160 VAC

0.0010	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 102K250 TA16
0.0015	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 152K250 TA16
0.0022	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 222K250 TA16
0.0033	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 332K250 TA16
0.0047	3.5	12.0	6.0	3.5	5.0	1000	2000	CQ92M 472K250 TA16
0.0068	3.5	13.0	6.0	4.5	5.0	1000	2000	CQ92M 682K250 TA16
0.010	4.5	13.5	7.5	4.5	5.0	1000	2000	CQ92M 103K250 TA16
0.015	4.5	13.5	8.0	5.0	5.0	1000	2000	CQ92M 153K250 TA16
0.022	5.5	14.0	9.0	5.0	5.0	1000	2000	CQ92M 223K250 TA16
0.033	5.5	14.0	9.0	5.0	5.0	1000	1000	CQ92M 333K250 TA16
0.047	6.5	14.0	10.0	5.5	5.0	1000	1000	CQ92M 473K250 TA16
0.068	7.0	15.0	12.0	6.5	5.0	1000		CQ92M 683K250
0.10	8.0	15.0	13.0	7.5	5.0	1000		CQ92M 104K250

## ARTICLE TABLE SCQ92M

Capacitance $\mu\text{F}$	Max dimensions in mm					Quantity per package		Article code
	B	H	L	p	R	Bulk	Ammo	
<b>50 VDC/30 VAC</b>								
0.0010	3.0	8.0	6.0	3.5	5.0	1000	2000	SCQ92M 102K50 TA16
0.0015	3.0	8.0	6.0	3.5	5.0	1000	2000	SCQ92M 152K50 TA16
0.0022	3.0	8.0	6.0	3.5	5.0	1000	2000	SCQ92M 222K50 TA16
0.0033	3.0	8.0	6.0	3.5	5.0	1000	2000	SCQ92M 332K50 TA16
0.0047	3.5	8.0	6.0	3.5	5.0	1000	2000	SCQ92M 472K50 TA16
0.0068	3.5	8.0	6.5	3.5	5.0	1000	2000	SCQ92M 682K50 TA16
0.010	3.5	8.0	6.5	3.5	5.0	1000	2000	SCQ92M 103K50 TA16
0.015	3.5	9.5	6.5	3.5	5.0	1000	2000	SCQ92M 153K50 TA16
0.022	5.0	10.0	6.5	3.5	5.0	1000	2000	SCQ92M 223K50 TA16
0.033	5.0	10.0	8.0	3.5	5.0	1000	2000	SCQ92M 333K50 TA16
0.047	5.0	10.5	8.0	5.0	5.0	1000	1000	SCQ92M 473K50 TA16
0.068	5.0	11.0	9.5	5.0	5.0	500	1000	SCQ92M 683K50 TA16
0.10	6.0	11.5	10.0	5.0	5.0	500	1000	SCQ92M 104K50 TA16
0.15	6.5	12.5	11.0	5.0	5.0	500	1000	SCQ92M 154K50 TA16
0.22	7.0	14.5	11.5	7.5	5.0	500	1000	SCQ92M 224K50 TA16
0.33	7.5	14.5	12.5	7.5	7.5	500		SCQ92M 334K50
0.47	8.5	15.0	14.5	7.5	7.5	500		SCQ92M 474K50