

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

# SOLID TANTALUM ELECTROLYTIC CAPACITORS

**F72** Low Profile  
Conformal coated Chip

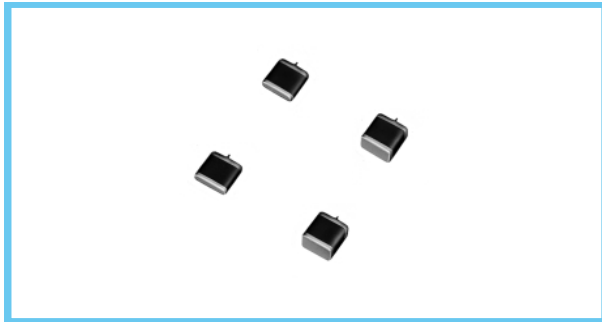
**F75** Maximum CV  
Conformal coated Chip

FRAMELESS™

Upgrade



● Compliant to the RoHS directive (2002/95/EC).

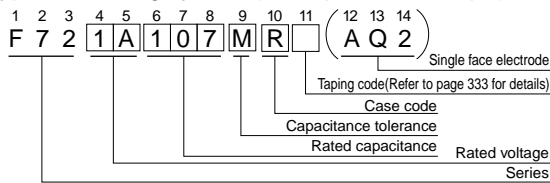


■ Applications

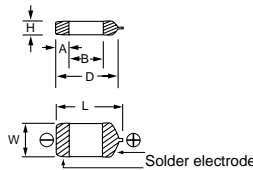
- Wireless modem
- Tablet PC
- e-book
- SSD
- Smart meter

F72

■ Type numbering system (Example : 10V 100μF)



■ Drawing



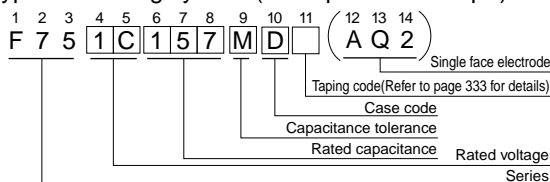
■ Dimensions

Case code	L	W	H	A	B	(D)
R	7.2 ± 0.3	6.0 ± 0.3	1.2 ± 0.3	1.3 ± 0.4	3.8 ± 0.6	(6.2)
M	7.2 ± 0.3	6.0 ± 0.3	2.0MAX.	1.3 ± 0.4	3.8 ± 0.6	(6.2)

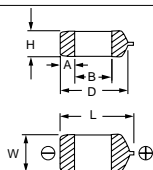
D dimension only for reference

F75

■ Type numbering system (Example : 16V 150μF)



■ Drawing

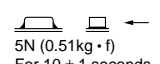
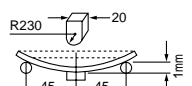


■ Standard Ratings

F72	Cap.(μF)	Code	V			
			4	6.3	10	16
	33	336	0G	0J	1A	1C
	47	476			R	R
	68	686		R	R	R
	100	107	R	R	R	
	150	157	R	R	R	
	220	227	R	R	R	
	330	337	R	R	(R)	
	470	477			M	
	680	687			M	
	1000	108		M	M	
	1500	158		M		

( ) The series in parentheses are being developed. Please contact to your local Nichicon sales office when these series are being designed in your application.

■ Specifications

Item	Performance Characteristics
Category	-55 to +125°C (Rated temperature : +85°C)
Temperature Range	
Capacitance Tolerance	±20%, ±10% (at 120Hz)
Dissipation Factor (120Hz)	Refer to next page
ESR (100kHz)	Refer to next page
Leakage Current	<ul style="list-style-type: none"> <li>• After 1 minute's application of rated voltage, leakage current at 20°C is not more than 0.01CV or 0.5μA, whichever is greater.</li> <li>• After 1 minute's application of rated voltage, leakage current at 85°C is not more than 0.1CV or 5μA, whichever is greater.</li> <li>• After 1 minute's application of derated voltage, leakage current at 125°C is not more than 0.125CV or 6.3μA, whichever is greater.</li> </ul>
Capacitance Change by Temperature	+15% Max. (at +125°C) +10% Max. (at +85°C) -10% Max. (at -55°C)
Damp Heat (Steady State)	At 40°C, 90 to 95% R.H., For 500 hours (No voltage applied) Capacitance Change ..... Refer to * 1 Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Temperature Cycles	At -55°C / +125°C, 30 minutes each, For 5 cycles, Capacitance Change ..... Refer to * 1 Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Resistance to Soldering Heat	10 seconds reflow at 260°C, 10 seconds immersion at 260°C Capacitance Change ..... Refer to * 1 Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Surge*	After application of surge in series with a 33Ω resistor at the rate of 30 seconds ON, 30 seconds OFF, for 1000 successive test cycles at 85°C, capacitors shall meet the characteristic requirements table below. Capacitance Change ..... Refer to * 1 Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Endurance*	After 2000 hours' application of rated voltage at 85°C, capacitors shall meet the characteristic requirements table below. Capacitance Change ..... Refer to * 1 Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Shear Test	After applying the pressure load of 5N for 10±1 seconds horizontally to the center of capacitor side body which has no electrode and has been soldered beforehand on a substrate, there shall be found neither exfoliation nor its sign at the terminal electrode. 
Terminal Strength	Keeping a capacitor surface-mounted on a substrate upside down and supporting the substrate at both of the opposite bottom points 45mm apart from the center of capacitor, the pressure strength is applied with a specified jig at the center of substrate so that the substrate may bend by 1mm as illustrated. Then, there shall be found no remarkable abnormality on the capacitor terminals. 

\* As for the surge voltage, refer to page 332 for details.

■ Dimensions

Case code	L	W	H	A	B	(D)
U	7.1 ± 0.3	3.2 ± 0.3	2.0MAX.	1.3 ± 0.3	3.6 ± 0.6	(6.0)
C	7.1 ± 0.3	3.2 ± 0.3	2.5 ± 0.3	1.3 ± 0.3	3.6 ± 0.6	(6.0)
D	7.3 ± 0.3	4.3 ± 0.3	2.8 ± 0.3	1.3 ± 0.4	3.9 ± 0.6	(6.4)
R	7.2 ± 0.3	6.0 ± 0.3	3.5 ± 0.3	1.3 ± 0.4	3.8 ± 0.6	(6.2)

D dimension only for reference

F75	Cap.(μF)	Code	V			
			4	6.3	10	16
	68	686				C
	100	107				C
	150	157				D
	220	227				R
	330	337	C	C · D	D	
	470	477	C · D	U · D	U · R	
	680	687	D	(U) · D · R		
	1000	108	D · R	(U) · R		
	1500	158	R			
	2200	228	R			

## F72

### Standard Ratings

Rated Volt	Rated Capacitance (μF)	Case code	Part Number	Leakage Current (μA)	Dissipation Factor (%@120Hz)	ESR (Ω@100kHz)	*1 ΔC/C (%)
4V	100	R	F720G107MRC	4.0	8	0.70	*
	150	R	F720G157MRC	6.0	10	0.70	*
	220	R	F720G227MRC	8.8	12	0.70	*
	330	R	F720G337MRC	13.2	12	0.70	*
6.3V	68	R	F720J686MRC	4.3	6	0.75	*
	100	R	F720J107MRC	6.3	8	0.70	*
	150	R	F720J157MRC	9.5	10	0.70	*
	220	R	F720J227MRC	13.9	12	0.70	*
	330	R	F720J337MRC	20.8	12	0.70	*
	1000	M	F720J108MMC	63.0	30	0.14	±15
	1500	M	F720J158MMC	95.0	45	0.14	±20
10V	47	R	F721A476MRC	4.7	6	0.80	*
	68	R	F721A686MRC	6.8	6	0.75	*
	100	R	F721A107MRC	10.0	8	0.70	*
	150	R	F721A157MRC	15.0	10	0.70	*
	220	R	F721A227MRC	22.0	12	0.70	*
	470	M	F721A477MMC	47.0	30	0.14	±15
	680	M	F721A687MMC	68.0	35	0.14	±20
	1000	M	F721A108MMC	200	45	0.14	±20
16V	33	R	F721C336MRC	5.3	6	0.90	*
	47	R	F721C476MRC	7.5	6	0.80	*
	68	R	F721C686MRC	10.9	6	0.75	*

\*1 : ΔC/C Marked "\*\*"

	F72 ALL Case (%)
Damp Heat	±10
Temperature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10

## F75

### Standard Ratings

Rated Volt	Rated Capacitance (μF)	Case code	Part Number	Leakage Current (μA)	Dissipation Factor (%@120Hz)	ESR (Ω@100kHz)	*1 ΔC/C (%)
4V	330	C	F750G337MCC	13.2	10	0.15	*
	470	C	F750G477MCC	18.8	14	0.12	*
	470	D	F750G477MDC	18.8	14	0.12	*
	680	D	F750G687MDC	27.2	18	0.12	*
	1000	D	F750G108MDC	40.0	24	0.12	*
	1000	R	F750G108MRC	40.0	24	0.12	*
	1500	R	F750G158MRC	60.0	30	0.12	*
	2200	R	F750G228MRC	88.0	45	0.07	*
	6.3V	220	C	F750J227MCC	13.9	10	0.20
330		C	F750J337MCC	20.8	10	0.15	*
330		D	F750J337MDC	20.8	10	0.15	*
470		U	F750J477MUC	29.6	15	0.10	*
470		D	F750J477MDC	29.6	14	0.12	*
680		D	F750J687MDC	42.8	18	0.12	*
680		R	F750J687MRC	42.8	18	0.12	*
1000		R	F750J108MRC	63.0	24	0.12	*
10V		150	C	F751A157MCC	15.0	10	0.22
	220	C	F751A227MCC	22.0	10	0.20	*
	220	D	F751A227MDC	22.0	10	0.20	*
	330	D	F751A337MDC	33.0	10	0.15	*
	470	U	F751A477MUC	94.0	30	0.15	±20
	470	R	F751A477MRC	47.0	14	0.12	*
16V	68	C	F751C686MCC	10.9	10	0.22	*
	100	C	F751C107MCC	16.0	10	0.22	*
	150	D	F751C157MDC	24.0	10	0.22	*
	220	R	F751C227MRC	35.2	10	0.20	*

\*1 : ΔC/C Marked "\*\*"

	F75 ALL Case (%)
Damp Heat	±10
Temperature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10