SOLID TANTALUM ELECTROLYTIC CAPACITORS

nichicon

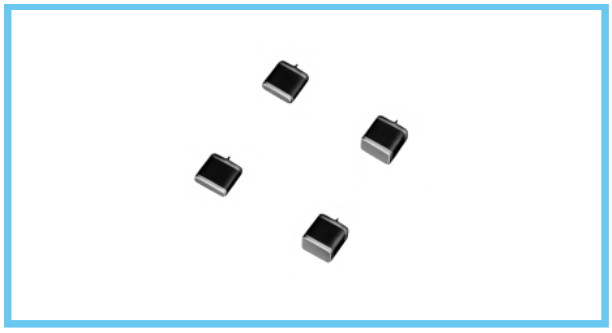
F72 Low Profile Conformal coated Chip

F75 Maximum CV Conformal coated Chip

FRAMELESS™ Upgrade

For SMD · Smaller · For High Frequency

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

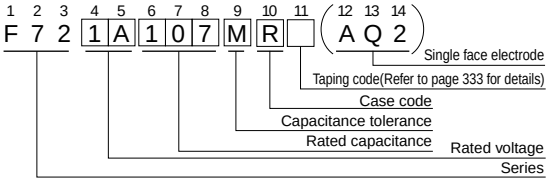


■ Applications

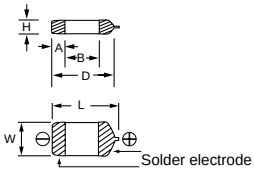
- ● Wireless modem
- ● e-book
- ● Tablet PC
- ● SSD
- ● Smart meter

F72

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



■ Drawing



■ Dimensions

(mm)

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

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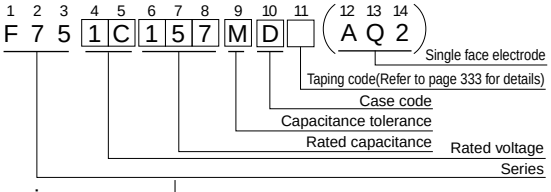
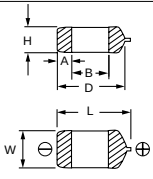
■ Type numbering system (Example : 16V 150µF)



■ Drawing



■ Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +125°C (Rated temperature : +85°C)
Capacitance Tolerance	±20%, ±10% (at 120Hz)
Dissipation Factor (120Hz)	Refer to next page
ESR (100kHz)	Refer to next page
Leakage Current	• 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. • After 1 minute's application of rated voltage, leakage current at 85°C is not more than 0.1CV or 5µA, whichever is greater. • 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.
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 Currentv ····· 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. 5N (0.51kg・f) For 10 ± 1 seconds
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. R230 · 20 · 45 · 45 · 1mm

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

■ Dimensions

(mm)

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

■ Standard Ratings

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Cap.(µF) \ V	Code	4	6.3	10	16
		0G	0J	1A	1C
33	336				R
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.

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Cap. (µF) \ V	Code	4	6.3	10	16
		0G	0J	1A	1C
68	686				C
100	107				C
150	157			C	D
220	227		C	C・D	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			

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■ Standard Ratings

Rated Volt	Rated Capacitance (μF)	Case code	Part Number	Leakage Current (μA)	Disspation 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
Tempereature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10

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■ Standard Ratings

Rated Volt	Rated Capacitance (μF)	Case code	Part Number	Leakage Current (μA)	Disspation 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
Tempereature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10

ООО «ЛайфЭлектроникс» “LifeElectronics” LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

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- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

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- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

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