THIRD ANGLE PROJECTION

Type designation	Part No.	Cap. (μF)	(*)	Dimensions L	T	H	F	d	P	Q	MARKING STYLE
ECQUA	ECQUAAF822 () A	0.0082	(822)	15.3	5.0	11.5	12.5	0.6	0±0.8	1.5	1
〃	〃 AF103 () A	0.01	(103)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF123 () A	0.012	(123)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF153 () A	0.015	(153)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF183 () A	0.018	(183)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF223 () A	0.022	(223)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF273 () A	0.027	(273)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF333 () A	0.033	(333)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF393 () A	0.039	(393)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF473 () A	0.047	(473)	〃	6.0	13.0	〃	〃	〃	〃	〃
〃	〃 AF563 () A	0.056	(563)	17.5	5.0	12.0	15.0	〃	〃	1.3	〃
〃	〃 AF683 () A	0.068	(683)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF823 () A	0.082	(823)	〃	〃	〃	〃	〃	〃	〃	〃
〃	〃 AF104 () A	0.1	(104)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF124 () A	0.12	(124)	〃	6.0	13.0	〃	〃	〃	〃	1
〃	〃 AF154 () A	0.15	(154)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF184 () A	0.18	(184)	〃	7.5	14.0	〃	〃	〃	〃	1
〃	〃 AF224 () A	0.22	(224)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF274 () A	0.27	(274)	〃	9.0	16.0	〃	〃	〃	〃	1
〃	〃 AF334 () A	0.33	(334)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF394 () A	0.39	(394)	26.0	8.5	15.0	22.5	0.8	〃	1.8	1
〃	〃 AF474 () A	0.47	(474)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF564 () A	0.56	(564)	〃	10.0	17.0	〃	〃	〃	〃	1
〃	〃 AF684 () A	0.68	(684)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF824 () A	0.82	(824)	〃	12.0	19.0	〃	〃	〃	〃	1
〃	〃 AF105 () A	1.0	(105)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF125 () A	1.2	(125)	31.0	12.0	22.0	27.5	〃	〃	〃	1
〃	〃 AF155 () A	1.5	(155)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF185 () A	1.8	(185)	〃	14.5	24.5	〃	〃	〃	〃	1
〃	〃 AF225 () A	2.2	(225)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF275 () A	2.7	(275)	〃	19.0	29.0	〃	〃	〃	〃	1
〃	〃 AF335 () A	3.3	(335)	〃	〃	〃	〃	〃	〃	〃	2
〃	〃 AF475 () A	4.7	(475)	〃	23.0	33.0	〃	〃	〃	〃	〃

Tol. symbol (K or M)

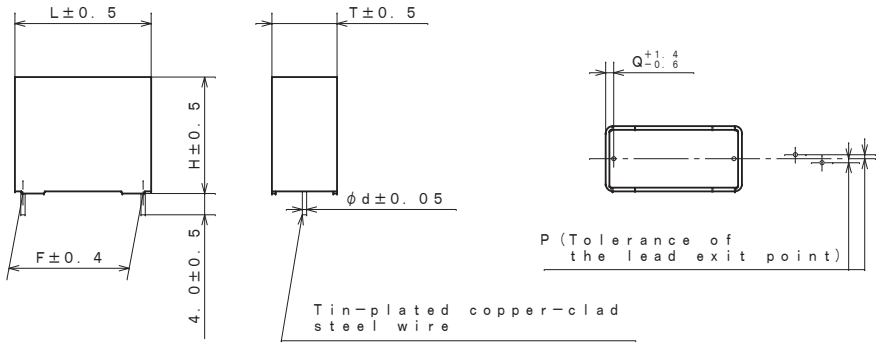
PACKING QUANTITY

Capacitance range (μF)	Quantity (pcs.)
0.0082～0.1	1600
0.12 ～0.15	1200
0.18 ～0.22	1000
0.27 ～0.47	800
0.56 ～0.68	500
0.82 ～1.0	300
1.2 ～2.2	200
2.7 ～3.3	150
4.7	100

QUANTITY of MINIMUM ORDER

Capacitance range (μF)	Quantity (pcs.)
0.0082～0.22	1000
0.27 ～0.47	800
0.56 ～0.68	500
0.82 ～1.0	300
1.2 ～2.2	200
2.7 ～3.3	150
4.7	100

ALTERATION		
ISSUE	DESCRIPTION	DATE
SPECIFICATIONS No.		



・F: Regulation of the root

ITEM CODE NUMBER STRUCTURE

ECQUA AF 104 M A (275VAC, 0.1μF, ±20%)

- A: Short leads
- M: Capacitance tolerance (M=±20%)
- 104: Capacitance (*)
- AF: Rated voltage (AF…275VAC)

DESIGN	M. MEKADA
CHECKED	H. OCHIDA
APPROVAL	T. KATO
ESTABLISHMENT	Nov. 1. 2022
TYPE NAME	ECQUAAF***() A
NAME	Safety Standard approval Metallized Capacitor
DRAWING NAME	PRODUCT DRAWING
DRAWING No.	M015B-J-E (1/2)

REFERENCE

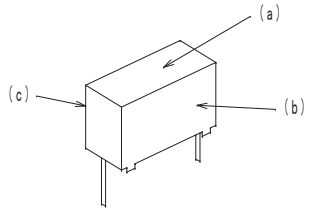
Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.

DO NOT SCALE DRAWING REVISIONS INDICATED BY Δ ALL DIMENSIONS ARE IN MILLIMETERS

THIRD ANGLE PROJECTION

STYLE	(a) SIDE	(b) or (c) SIDE
1	ECQUA103K	15 275V~ X2 cULus date code
2	ECQUA104 10 275V~ X2 cULus	K date code

(Note) Only ±10% as capacitance tolerance to be marked as "K"



Note When applying for the agency, designate the capacitor in the following form, "ECQUA, 0.33μF"
The part number need not be specified.

North America	UL60384-14
	CAN/CSA-E60384-14
Europe	IEC60384-14
	EN60384-14
	CLASS X2

CONSTRUCTION

The capacitor is of non-inductive construction, would with metallized polypropylene film dielectric.
The capacitor is enclosed in non-combustible polybutylene telephthalate case, filled with non-combustible epoxy resin and has two leads.

MARKING

Marking comprises capacitance, capacitance tolerance (K only), rated voltage, type designation, capacitor classification, manufacturer's trademark, recognition mark and date code.

PROPERTIES

Capacitance	: See table	at 1kHz
Capacitance tolerance	: ±10% (K), ±20% (M)	at 1kHz
Rated voltage	: 275VAC	
Withstand voltage (terminal-terminal)	: 633VAC or 1183VDC	for 60s
(terminal-enclosure)	: 2050VAC	for 60s
Insulation resistance	: ≧15000MΩ (C≦0.33μF)	at 100VDC for 60s, 20℃
	: ≧5000MΩ・μF (C>0.33μF)	at 100VDC for 60s, 20℃
	: ≧2000MΩ (C≦0.47μF)	at 500VDC for 60s, 20℃
Dissipation factor	: ≦0.1% (C≦1.0μF)	at 1kHz, 20℃
	: ≦0.2% (C>1.0μF)	at 1kHz, 20℃
Category temperature range	: From −40℃ to +110℃	

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REFERENCE

TYPE NAME	ECQUAAF***() A
DRAWING No.	M015B-J-E (2/2)

Film Capacitor Business Unit
Device Solutions Business Division
Panasonic Industry Co., Ltd.