# FPCAP

## Functional Polymer Aluminum Solid Electrolytic Capacitors



#### Features

By using Functional Polymer cathode, Frequency & Temp. characteristics are greatly improved.

- · Low ESR at a high frequency range.
- · High ripple current capability.
- · Long life and high reliability.(Reliability:0.1%/1000Hrs)

#### Applications

- · Switching Power Supply and DC/DC Converter.
- Buck up Power Supplies of CPU(VRM etc.)
- · Miniature high Power Supply.

### Environmental Correspondence

Any environmental hazardous substances are not used. • The lead free of terminal plating (Sn 100%)

### Specifications



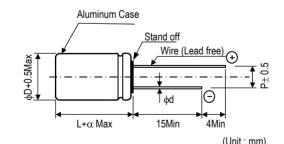


Items		Characteristics				
		NS Туре				
Operating Temp. Range		-55 to +105°C				
Rated Voltage Range		4.0 to 25V DC				
Capacitance Range		10 to 1200µF				
Capacitance Tolerance		±20% (M)				
	Condition	105°C 2000Hrs at rated voltage				
Endurance	Capacitance	Within ±20% of the value before test				
	Leakage Current	Not to exceed the value specified				
	$\tan \delta$	Not to exceed 150% of the value specified				
Reliability		0.1% / 1000Hrs. Max (60%CL)				
Others		JIS-C-5101-4				

#### Size List

Size	List					(¢D×L)
RV.(V)	4.0	6.3	10	16	20	25
Cap(μF)	4.6	7.2	11.5	18.4	23.0	28.7
10						6.3×7
15					6.3×7	6.3×10
22				6.3×7	6.3×7	8×11.5
33			6.3×7	6.3×7	6.3×10	10×12.5
47		6.3×7		6.3×10	8×11.5	10×12.5
68			6.3×10	8×11.5	8×11.5	
100			8×11.5	8×11.5	10×12.5	
150		8×11.5		10×12.5		
180				8×11.5		
220		8×11.5	10×12.5			
330		10×12.5		10×12.5		
390		8×11.5				
470			10×12.5			
560	8×11.5					
680		10×12.5				
820	10×12.5	10×12.5				
1000		10×12.5				
1200	10×12.5					

#### Dimensions



(=						
$\phi D \times L$	φd	Р	α			
6.3×7	0.45	2.5	1.0			
6.3×10	0.6	2.5	1.0			
8×11.5	0.6	3.5	1.5			
10×12.5	0.6	5.0	1.5			

#### FUJITSU MEDIA DEVICES LIMITED

#### **Functional Polymer Capacitors** (**FPCAP**) Part number & Specifications

Rated Voltage	Capacitance	Part Number	Leakage Current	tan <sub>ð</sub>	ESR	Maxmun permissible Ripple Current	Case Size
(V)	(µF, 120Hz)		(µA, 2 min)	(120Hz)	(mΩ, 100kHz)	(mA, r.m.s.)	ФD×L(mm)
	560	FP-4R0RE561M-NS	336.0	0.080	10	5230	8×11.5
4.0	820	FP-4R0RE821M-NSDD	492.0	0.080	10	5500	10×12.5
	1200	FP-4R0RE122M-NS	720.0	0.150	10	5500	10×12.5
	47	FP-6R3RE470M-NS	50.0	0.070	42	2050	6.3×7
	150	FP-6R3RE151M-NS	141.8	0.070	21	3900	8×11.5
	220	FP-6R3RE221M-NS	207.9	0.070	21	3900	8×11.5
6.3	330	FP-6R3RE331M-NS	311.9	0.070	10	5500	10×12.5
0.3	390	FP-6R3RE391M-NS	368.6	0.080	10	5230	8×11.5
	680	FP-6R3RE681M-NS	642.6	0.080	10	5500	10×12.5
	820	FP-6R3RE821M-NS	774.9	0.120	10	5500	10×12.5
	1000	FP-6R3RE102M-NS	945.0	0.120	10	5500	10×12.5
	33	FP-010RE330M-NS	50.0	0.070	49	1900	6.3×7
	68	FP-010RE680M-NSDD	102.0	0.070	35	2650	6.3×10
10	100	FP-010RE101M-NS	150.0	0.070	21	3900	8×11.5
	220	FP-010RE221M-NS	330.0	0.070	10	5500	10×12.5
	470	FP-010RE471M-NS	705.0	0.080	10	5500	10×12.5
	22	FP-016RE220M-NS	52.8	0.060	49	1900	6.3×7
	33	FP-016RE330M-NS	79.2	0.060	49	1900	6.3×7
16	47	FP-016RE470M-NS	112.8	0.060	42	2400	6.3×10
	68	FP-016RE680M-NS	163.2	0.060	25	3600	8×11.5
	100	FP-016RE101M-NS	240.0	0.060	21	3900	8×11.5
	150	FP-016RE151M-NS	360.0	0.060	10	5500	10×12.5
	180	FP-016RE181M-NS	432.0	0.080	16	4700	8×11.5
	330	FP-016RE331M-NS	792.0	0.080	10	5500	10×12.5
	15	FP-020RE150M-NS	50.0	0.060	63	1700	6.3×7
	22	FP-020RE220M-NSDD	66.0	0.060	49	1900	6.3×7
20	33	FP-020RE330M-NS	99.0	0.060	49	2200	6.3×10
20	47	FP-020RE470M-NS	141.0	0.060	28	3400	8×11.5
	68	FP-020RE680M-NS	204.0	0.060	25	3600	8×11.5
	100	FP-020RE101M-NS	300.0	0.060	15	4500	10×12.5
	10	FP-025RE100M-NS	50.0	0.060	63	1700	6.3×7
	15	FP-025RE150M-NSDD	75.0	0.060	49	2200	6.3×10
25	22	FP-025RE220M-NS	110.0	0.060	28	3400	8×11.5
	33	FP-025RE330M-NS	165.0	0.060	20	3800	10×12.5
	47	FP-025RE470M-NS	235.0	0.060	20	3800	10×12.5

#### • Part Number (EX) 16V100µF

FP —	016	RE	101	M	— <u>N</u>	S	R	
Community Mark	Rated Voltage	Series Name	Capacitance	Capacitance Tolerance	Type Sy	ſ	Lead Forming R: Bulk Long lead J: 2.5mm pitch taping K: 3.5mm pitch taping	

#### FUJITSU MEDIA DEVICES LIMITED

#### http://jp.fujitsu.com/fmd/en/

North and South America FUJITSU MEDIA DEVICES OF AMERICA, INC. Tel: +1-408-746-7500 Fax: +1-408-746-7555 http://www.fmda.fujitsu.com/

Europe FUJITSU MICROELECTRONICS EUROPE GmbH Tel: +49-6103-690-0 Fax: +49-6103-690-122 http://www.fme.fujitsu.com/

Japan Global Sales

Shin-Yokohama Square Bldg., 14F Shin-Yokohama 2-3-12, Kohoku-ku, Yokohama, Kanagawa 222-0033, Japan Tel: +81-45-471-0061 Fax: +81-45-471-0076

> Asia Pacific FUJITSU MEDIA DEVICES HONG KONG LTD. Tel: +852-2866-8509 Fax: +852-2866-8287 (Taiwan Representative office) Tel: +886-2-2311-2255 Fax: +886-2-2371-8347 FUJITSU MEDIA DEVICES TRADING (SHANGHAI) LTD. Tel: +86-21-6323-4560 Fax: +86-21-6323-4510

P: φ8 5mm pitch taping PH: φ10 5mm pitch taping CG: Bulk cut lead

Specifications are subject to change without notice. For further information please contact each office.

The contents of this document are subject to change without notice

The contents of this document are subject to change without notice. Customers are advised to consult with FUJITSU MEDIA DEVICES sales representatives before ordering. The information, such as descriptions of function and application circuit examples, in this document are presented solely for the purpose of reference to show examples of operations and uses of FUJITSU MEDIA DEVICES electronic device; FUJITSU MEDIA DEVICES does not warrant proper operation of the device with respect to use based on such information. When you develop equipment incorporating the device based on such information, you must assume any responsibility arising out of such use of the information. FUJITSU MEDIA DEVICES desort the such as descriptions of function and schematic diagrams, shall not be construed as license of the use or exercise of any intellectual property right, such as patent right or copyright, or any information in this document, including descriptions of function and schematic diagrams, shall not be construed as license of the use or exercise of any intellectual property right, such as patent right or copyright, or any other right of LUITSU MEDIAD EVICES warrant non-intringement of any third-party's intellectual property right or any ris right or any right or any right or an from Japan.

#### ©2007FUJITSU MEDIA DEVICES LIMITED Printed in Japan