



- Super low ESR, impedance and high heat resistance have been obtained by using conductive polymer as electrolyte.
- Rated voltage range: 2.5 to 25Vdc, Capacitance range: 56 to 1,200μF
- **©** Case size range :  $\phi$  6.3×5.8L to  $\phi$  8×6.7L
- Suitable for DC-DC converters, voltage regulators and decoupling applications used on computer motherboards etc.
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- Halogen Free





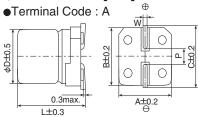
### **SPECIFICATIONS**

Items	Characteristics									
Category Temperature Range	-55 to +105℃									
Rated Voltage Range	2.5 to 25V₀c									
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)									
Leakage Current *Note	Shall not exceed values shown in STANDARD RATINGS.  (at 20°C after 2 minutes)									
Dissipation Factor (tan δ)	0.12 max. (at 20°C, 120Hz)									
Low Temperature Characteristics (Max. Impedance Ratio)	$Z(-25^{\circ})/Z(+20^{\circ})$ ≦1.15 $Z(-55^{\circ})/Z(+20^{\circ})$ ≦1.25 (at 100kHz)									
Endurance	The following specification at 105℃.	ns shall be	satisfied w	hen the ca	pacitors a	re restore	d to 20℃ a	after the rated voltage is applied for 15,000 hours		
	Appearance	Appearance No significant damage								
	Capacitance change	<u> </u>								
	D.F. (tan δ )	≤150% of the initial specified value								
	ESR ≤150% of the initial specified value									
	Leakage current	eakage current ≦The initial specified value								
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to the DC rated voltage at 60°C, 90 to 95% RH for 1,000 hours.									
	Appearance	No signi	ficant dam	age	]					
	Capacitance change	≦±20%	of the init	tial value						
	D.F. $(\tan \delta)$ $\leq 150\%$ of the initial specified value				1					
	ESR ≦150% of the initial specified value					]				
	Leakage current									
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105℃ for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.									
	Rated voltage (Vdc)	2.5	6.3	10	16	20	25			
	Surge voltage (V <sub>dc</sub> )	2.9	7.2	12	18	23	29			
	Appearance No significant damage									
	Capacitance change	≦±20%	of the init	tial value	1					
	D.F. (tan δ )	≦150%	of the initi	al specified	d value	1				
	ESR ≦150% of the initial specified value					1				
	Leakage current	≦The in	itial specif	ied value	1					
Soldering Heat	The following specifications shall be satisfied when the solder temperature is reduced back to 20°C to measure dip resistance after									
	soldering has been performed under the recommended soldering conditions.									
	Appearance	No signi	ficant dam	age						
	Capacitance value	Within th	ne specifie	d tolerance	range					
	D.F. (tan δ )	≦The in	≦The initial specified value							
	ESR	≦The initial specified value								
	Leakage current	≦The initial specified value (Voltage treatment)								

\*Note: If any doubt arises, measure the leakage current after the following voltage treatment.

Voltage treatment: DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

## **♦DIMENSIONS** [mm]



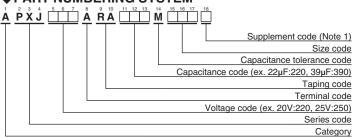
Size Code	φD	L	Α	В	С	W	Р
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9
FA0	6.3	9.7	6.6	6.6	7.2	0.5 to 0.8	1.9
H70	8	6.7	8.3	8.3	9.0	0.7 to 1.1	3.1







# **◆PART NUMBERING SYSTEM**



Please refer to "Product code guide (conductive polymer type)"

(Note1) :PXJ series,  $16V270\,\mu$  F (Rated ripple current 5,080mArms) have supplement code "J". Terminal and terminal plating are the same as all other in PXJ series.

#### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Size code	Leakage current (μA max./after 2min.)	ESR (mΩ max./20°C, 100k to 300kHz)	Rated ripple current (mArms/105℃, 100kHz)	Part No.
2.5	820	F61	1,020	10	4,900	APXJ2R5ARA821MF61G
	820	F80	1,020	7	5,000	APXJ2R5ARA821MF80G
	820	FA0	1,020	10	4,300	APXJ2R5ARA821MFA0G
2.5	1,000	FA0	1,250	10	4,300	APXJ2R5ARA102MFA0G
	1,200	FA0	1,500	10	4,300	APXJ2R5ARA122MFA0G
	1,200	H70	1,500	10	4,500	APXJ2R5ARA122MH70G
	390	F61	1,220	10	4,900	APXJ6R3ARA391MF61G
6.3	560	F80	1,760	8	5,000	APXJ6R3ARA561MF80G
6.3	560	FA0	1,760	10	4,300	APXJ6R3ARA561MFA0G
	680	H70	2,140	10	4,500	APXJ6R3ARA681MH70G
	270	F61	1,350	15	4,000	APXJ100ARA271MF61G
10	390	F80	1,950	13	4,460	APXJ100ARA391MF80G
10	390	FA0	1,950	13	4,000	APXJ100ARA391MFA0G
	470	H70	2,350	15	4,000	APXJ100ARA471MH70G
	220	F61	704	20	3,500	APXJ160ARA221MF61G
	270	F80	864	10	5,080	APXJ160ARA271MF80J
16	270	F80	864	13	4,460	APXJ160ARA271MF80G
	270	FA0	864	16	3,500	APXJ160ARA271MFA0G
	390	H70	1,240	25	3,600	APXJ160ARA391MH70G
	150	F61	600	23	3,300	APXJ200ARA151MF61G
20	150	F80	600	18	3,790	APXJ200ARA151MF80G
20	150	FA0	600	18	3,200	APXJ200ARA151MFA0G
	220	H70	880	28	3,300	APXJ200ARA221MH70G
0.5	56	F61	280	28	3,000	APXJ250ARA560MF61G
	82	F80	410	28	3,040	APXJ250ARA820MF80G
25	82	FA0	410	28	3,000	APXJ250ARA820MFA0G
	120	H70	600	38	3,200	APXJ250ARA121MH70G

Production of the products shown in \_\_\_\_\_ is scheduled to be discontinued.

#### **◆RATED RIPPLE CURRENT MULTIPLIERS**

#### Frequency Multipliers

Frequency(Hz)	120	1k	10k	50k	100k to 500k				
SMD type	0.05	0.30	0.55	0.70	1.00				