CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

NPCAP

- 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: 82 to 820μF
- Ocase size range: φ6.3×7.7L
- Suitable for DC-DC converters, voltage regulators and decoupling applications used on computer motherboards etc.
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant
- Halogen Free

♦SPECIFICATIONS

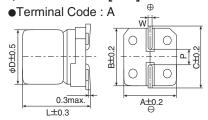




Items	Characteristics						
Category Temperature Range	-55 to +105℃						
Rated Voltage Range	2.5 to 25V _{dc}						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Surge Voltage	Rated voltage × 1.15						
Leakage Current	Shall not exceed values s	shown in STANDARD RATINGS.	(at 20°C after 2 minutes)				
Dissipation Factor (tan δ)	0.12 max. (at 20℃, 120Hz)						
Low Temperature Characteristics (Max. Impedance Ratio)	$Z(-25^{\circ}C)/Z(+20^{\circ}C) \le 1.15$ $Z(-55^{\circ}C)/Z(+20^{\circ}C) \le 1.25$ (at 100kHz)						
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 15,000 hours at 105℃.						
	Appearance	No significant damage					
	Capacitance change	\leq ±20% of the initial value					
	D.F. (tan δ)	≤150% of the initial specified value					
	ESR	≤150% of the initial specified value					
	Leakage current	≦The initial specified value					
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to the DC rated voltage at 60℃, 90 to 95% RH for 1,000 hours.						
	Appearance	No significant damage					
	Capacitance change	\leq ±20% of the initial value					
	D.F. (tan δ)	≤150% of the initial specified value					
	ESR	≤150% of the initial specified value					
	Leakage current	≦The initial specified value					
Surge Voltage	of charge with the surge voltage specified at 105℃ for 30 seconds 30 seconds.						
	Appearance	No significant damage					
	Capacitance change	\leq ±20% of the initial value					
	D.F. (tan δ)	≤150% of the initial specified value					
	ESR	≤150% of the initial specified value					
	Leakage current	≦The initial specified value					
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 105°C)						

^{*}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℃.

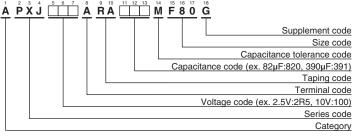
◆DIMENSIONS [mm]



Size Code	φD	L	Α	В	С	W	Р
F80	6.3	7.7	6.6	6.6	7.2	0.5 to 0.8	1.9



◆PART NUMBERING SYSTEM



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



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STANDARD RATINGS

WV (V _{dc})	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	F80	1,020	7	5,000	APXJ2R5ARA821MF80G
6.3	560	F80	1,760	8	5,000	APXJ6R3ARA561MF80G
10	390	F80	1,950	13	4,460	APXJ100ARA391MF80G
16	270	F80	864	13	4,460	APXJ160ARA271MF80G
20	150	F80	600	18	3,790	APXJ200ARA151MF80G
25	82	F80	410	28	3,040	APXJ250ARA820MF80G

CAT. No. E1001P