

# NPCAP™-P<sub>X</sub>G Series

- Super low ESR, high ripple current capability
- Rated voltage range : 16 to 25V<sub>dc</sub>, Capacitance : 22 to 180μF
- Case size : φ5×5.8L to φ6.3×5.8L
- RoHS Compliant
- Halogen Free



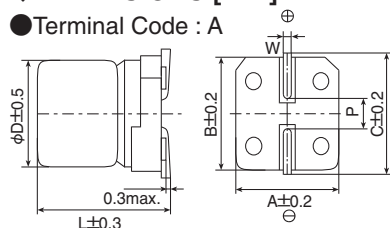
## ◆ SPECIFICATIONS

Items	Characteristics										
<b>Category</b>											
<b>Temperature Range</b>	-55 to +105°C										
<b>Rated Voltage Range</b>	16 to 25V <sub>dc</sub>										
<b>Capacitance Tolerance</b>	±20% (M) <span style="float: right;">(at 20°C, 120Hz)</span>										
<b>Surge Voltage</b>	Rated voltage×1.15 <span style="float: right;">(at 105°C)</span>										
<b>Leakage Current</b>	I=0.2CV										
<b>* Note</b>	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V <sub>dc</sub> ) <span style="float: right;">(at 20°C after 2 minutes)</span>										
<b>Dissipation Factor (tanδ)</b>	0.12 max. <span style="float: right;">(at 20°C, 120Hz)</span>										
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Z(-25°C)/Z(+20°C)≤1.15 Z(-55°C)/Z(+20°C)≤1.25 <span style="float: right;">(at 100kHz)</span>										
<b>Endurance</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C.										
	<table border="1" style="width: 100%;"> <tr><td>Appearance</td><td>No significant damage</td></tr> <tr><td>Capacitance change</td><td>≤±20% of the initial value</td></tr> <tr><td>DF (tanδ)</td><td>≤150% of the initial specified value</td></tr> <tr><td>ESR</td><td>≤150% of the initial specified value</td></tr> <tr><td>Leakage current</td><td>≤The initial specified value</td></tr> </table>	Appearance	No significant damage	Capacitance change	≤±20% of the initial value	DF (tanδ)	≤150% of the initial specified value	ESR	≤150% of the initial specified value	Leakage current	≤The initial specified value
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<b>Bias Humidity</b>	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.										
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<b>Surge Voltage</b>	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds through a protective resistor(R=1kΩ) and discharge for 5 minutes 30 seconds.										
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<b>Failure Rate</b>	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°C.

## ◆ DIMENSIONS [mm]

● Terminal Code : A



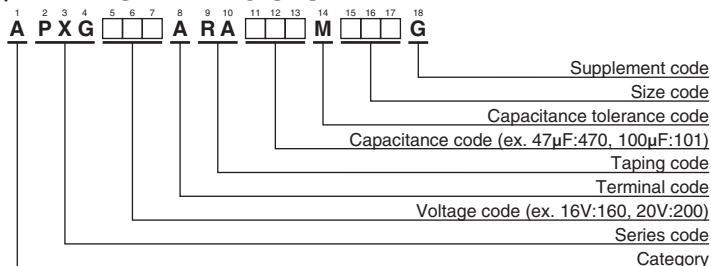
Size Code	φD	L	A	B	C	W	P
E61	5.0	5.8	5.3	5.3	5.9	0.5 to 0.8	1.4
F61	6.3	5.8	6.6	6.6	7.2	0.5 to 0.8	1.9

## ◆ MARKING

EX) 25V47μF



## ◆ PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆ **STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap ( $\mu$ F)	Size code	ESR ( $m\Omega$ max/20°C, 100k to 300kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part No.
16	100	E61	27	3,000	APXG160ARA101ME61G
	180	F61	22	3,300	APXG160ARA181MF61G
20	47	E61	30	2,800	APXG200ARA470ME61G
	56	E61	30	2,800	APXG200ARA560ME61G
	120	F61	25	3,200	APXG200ARA121MF61G
25	22	E61	40	2,450	APXG250ARA220ME61G
	27	E61	40	2,450	APXG250ARA270ME61G
	39	F61	30	2,800	APXG250ARA390MF61G
	47	F61	30	2,800	APXG250ARA470MF61G

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