

CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS



UGS Series

- Low ESR at a high frequency ranged
- High ripple current capability
- Large capacitance, size 6.3×16~10×20



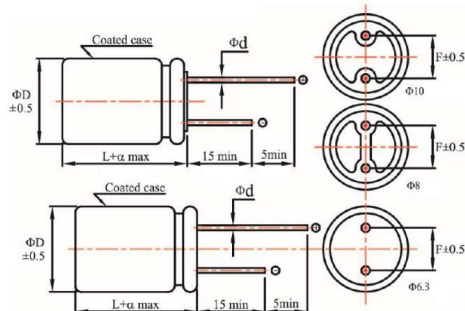
◆ SPECIFICATIONS

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Working Voltage Range	10 ~ 35Vdc								
Surge Voltage	Rated Voltage ×1.15								
Capacitance Tolerance	M: ±20% (at 25°C and 120Hz)								
ESR	See the standard ratings table (at 25°C, 100~300KHz)								
Dissipation Factor (Tanδ)	See the standard ratings table (at 25°C, 120Hz)								
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)								
Low Temperature Characteristics Impedance Ratio	$Z(-25^{\circ}\text{C})/Z(+25^{\circ}\text{C}) \leq 1.15$ at 100KHz $Z(-55^{\circ}\text{C})/Z(+25^{\circ}\text{C}) \leq 1.25$ at 100KHz								
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage for 2,000 hours at 105°C. <table border="1"> <tr> <td>Capacitance change</td><td>$\leq \pm 20\%$ of the initial value</td></tr> <tr> <td>ESR</td><td>$\leq 150\%$ of the specified value</td></tr> <tr> <td>Dissipation factor(tanδ)</td><td>$\leq 150\%$ of the specified value</td></tr> <tr> <td>Leakage current</td><td>$\leq$ specified value</td></tr> </table>	Capacitance change	$\leq \pm 20\%$ of the initial value	ESR	$\leq 150\%$ of the specified value	Dissipation factor(tanδ)	$\leq 150\%$ of the specified value	Leakage current	$\leq$ specified value
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ESR	$\leq 150\%$ of the specified value								
Dissipation factor(tanδ)	$\leq 150\%$ of the specified value								
Leakage current	$\leq$ specified value								
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 60°C 90 to 95% RH. <table border="1"> <tr> <td>Capacitance change</td><td>$\leq \pm 20\%$ of the initial value</td></tr> <tr> <td>ESR</td><td>$\leq 150\%$ of the specified value</td></tr> <tr> <td>Dissipation factor(tanδ)</td><td>$\leq 150\%$ of the specified value</td></tr> <tr> <td>Leakage current</td><td>$\leq$ specified value</td></tr> </table>	Capacitance change	$\leq \pm 20\%$ of the initial value	ESR	$\leq 150\%$ of the specified value	Dissipation factor(tanδ)	$\leq 150\%$ of the specified value	Leakage current	$\leq$ specified value
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ESR	$\leq 150\%$ of the specified value								
Dissipation factor(tanδ)	$\leq 150\%$ of the specified value								
Leakage current	$\leq$ specified value								
Others	Conforms to JIS-C-5101-26 (2012)								

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C.

※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

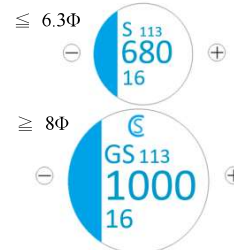
◆ DIMENSIONS (mm)



◆ LEAD

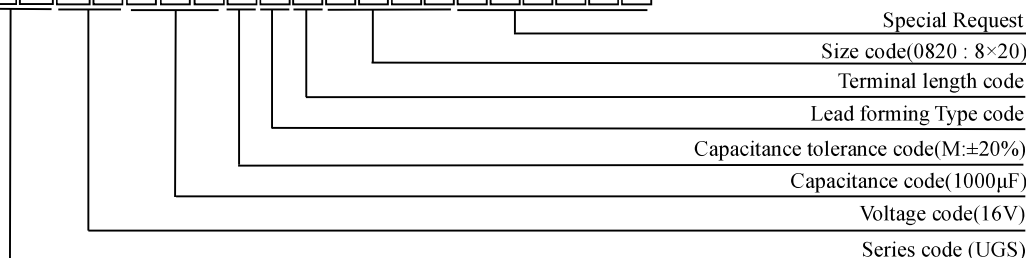
ΦD	6.3	8	10
Φd	0.6	0.6	0.6
L	16	16~20	16~22
α	1.5	1.5	1.5
F	2.5	3.5	5.0

◆ MARKING



◆ PART NUMBER SYSTEM (Example : 16V 1000μF)

U G S 1 C 1 0 2 M N N 0 8 2 0 U



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UGS Series

◆ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mA rms/ 105°C, 100KHz)	Tanδ max	Leakage Current (μA max)	Part Number
10 (1A)	1500	8×20	19	4500	0.12	3000	UGS1A152MNN0820U
16 (1C)	680	6.3×16	16	4000	0.12	1088	UGS1C681MNN6316
	820	8×16	10	5000	0.12	1312	UGS1C821MNN0816U
	1000	8×16	12	4700	0.12	3200	UGS1C102MNN0816U
	1000	8×20	8	6100	0.12	1600	UGS1C102MNN0820U
	1200	8×20	8	6100	0.12	1920	UGS1C122MNN0820U
	1500	8×20	8	6100	0.12	2400	UGS1C152MNN0820U
	1500	10×16	8	6100	0.12	2400	UGS1C152MNN1016U
	1800	10×16	8	6100	0.12	2880	UGS1C182MNN1016U
	1800	10×20	8	6100	0.12	2880	UGS1C182MNN1020U
	2200	10×20	8	6100	0.12	3520	UGS1C222MNN1020U
	2500	10×20	8	6100	0.12	4000	UGS1C252MNN1020U
	2700	10×20	10	5700	0.12	4320	UGS1C272MNN1020U
	3000	10×22	10	6100	0.12	4800	UGS1C302MNN1022U
20 (1D)	820	8×16	16	4650	0.12	3280	UGS1D821MNN0816U
	1000	10×16	16	4650	0.12	4000	UGS1D102MNN1016U
25 (1E)	470	8×16	16	4650	0.12	2350	UGS1E471MNN0816U
	470	8×20	16	4650	0.12	2350	UGS1E471MNN0820U
	680	8×16	16	4650	0.12	3400	UGS1E681MNN0816U
	820	8×20	16	5000	0.12	4100	UGS1E821MNN0820U
	1000	10×16	20	4000	0.12	5000	UGS1E102MNN1016U
22 (1P)	680	8×16	16	4650	0.12	1496	UGS1P681MNN0816U
35 (1V)	330	10×16	28	2600	0.12	2310	UGS1V331MNN1016U