

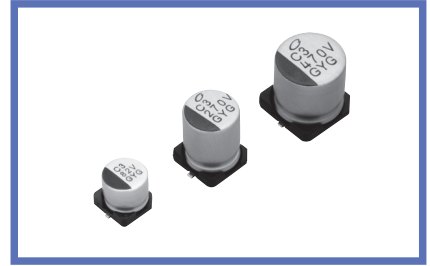
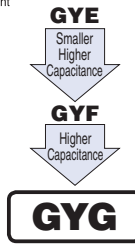
CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

GYG Chip Type, 125°C High Reliability



TENTATIVE

- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.

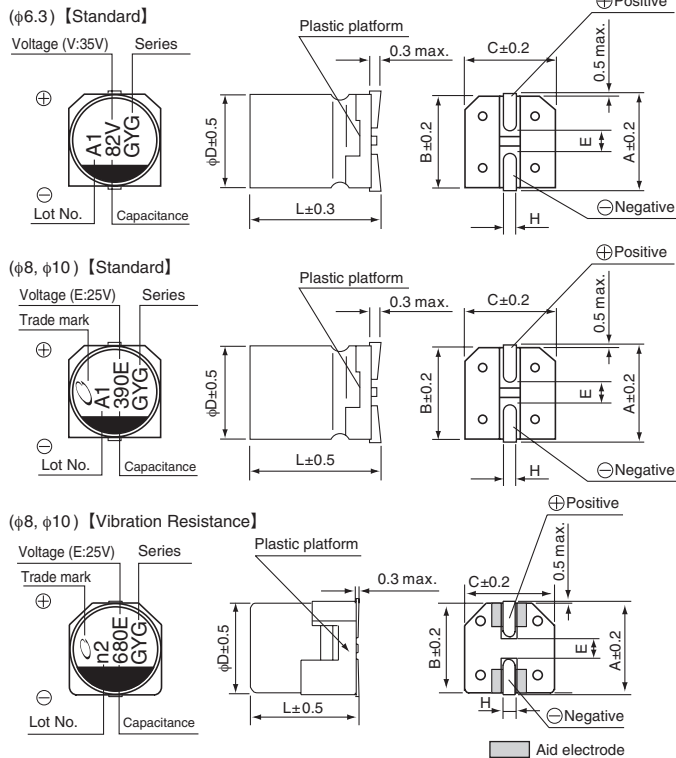


Specifications

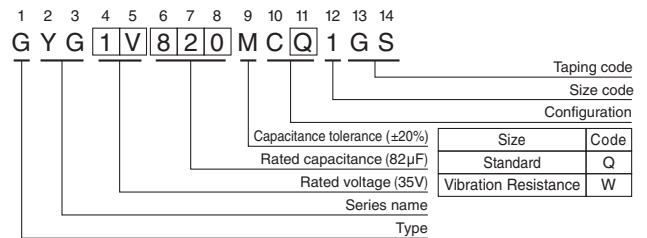
Item	Performance Characteristics									
Category Temperature Range	-55 to +125°C									
Rated Voltage Range	25 to 35V									
Rated Capacitance Range	82 to 680μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Tangent of loss angle (tan δ)	Rated voltage (V)	25 35 120Hz 20°C								
	tan δ (max.)	0.14 0.12								
ESR	Less than or equal to the specified value at 100kHz, 20°C									
Leakage Current ※	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV(μA).									
Temperature Characteristics (Max.Impedance Ratio)	Z(-25°C) / Z(+20°C) ≤ 2 Z(-55°C) / Z(+20°C) ≤ 2.5 (100kHz)									
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 4000 hours at 125°C, the peak voltage shall not exceed the rated voltage.	<table border="1"> <tr><td>Capacitance change</td><td>Within ± 30% of initial capacitance value</td></tr> <tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr> <tr><td>ESR</td><td>200% or less of the initial specified value</td></tr> <tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr> </table>	Capacitance change	Within ± 30% of initial capacitance value	tan δ	200% or less of the initial specified value	ESR	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value
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tan δ	200% or less of the initial specified value									
ESR	200% or less of the initial specified value									
Leakage current	Less than or equal to the initial specified value									
Shelf Life	After storing the capacitors under no load at 125°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.									
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C, 85% RH.	<table border="1"> <tr><td>Capacitance change</td><td>Within±30% of the initial capacitance value</td></tr> <tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr> <tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr> </table>	Capacitance change	Within±30% of the initial capacitance value	tan δ	200% or less of the initial specified value	Leakage current	Less than or equal to the initial specified value		
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Leakage current	Less than or equal to the initial specified value									
Resistance to Soldering Heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.	<table border="1"> <tr><td>Capacitance change</td><td>Within±10% of the initial capacitance value</td></tr> <tr><td>tan δ</td><td>Less than or equal to the initial specified value</td></tr> <tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr> </table>	Capacitance change	Within±10% of the initial capacitance value	tan δ	Less than or equal to the initial specified value	Leakage current	Less than or equal to the initial specified value		
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tan δ	Less than or equal to the initial specified value									
Leakage current	Less than or equal to the initial specified value									
Marking	Black print on the case top.									

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Dimensions



Type numbering system (Example : 35V 82μF)



Standard	(mm)			Voltage	Vibration Resistance (mm)		
	6.3x5.8	8x10	10x10	V	25	35	
A	7.3	9.0	11.0	Code	E	V	
B	6.6	8.3	10.3				
C	6.6	8.3	10.3				
E	2.2	3.1	4.5				
L	5.8	10.3	10.3				
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1				

Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.15	0.40	0.75	1.00

● Dimension table in next page.

Design, specifications are subject to change without notice.

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

GYG

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	$\tan \delta$	Leakage Current (μ A) (at 20°C after 2 minutes)	ESR (m Ω) max. (20°C/100kHz)	Rated Ripple (mA _{rms}) (125°C/100kHz)	Part Number
25 (1E)	120	6.3 \times 5.8	0.14	30.0	50	1400	GYG1E121MCQ1GS
	390	8 \times 10	0.14	97.5	22	2900	GYG1E391MC□1GS
	680	10 \times 10	0.14	170.0	20	3300	GYG1E681MC□1GS
35 (1V)	82	6.3 \times 5.8	0.12	28.7	55	1400	GYG1V820MCQ1GS
	270	8 \times 10	0.12	94.5	22	2900	GYG1V271MC□1GS
	470	10 \times 10	0.12	164.5	20	3300	GYG1V471MC□1GS

□ : Enter the appropriate configuration code.

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