# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

Chip Type, 125°C High Reliability













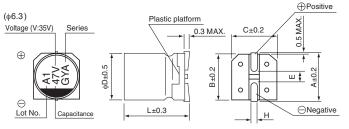
- ◆High Reliability, Low ESR, High ripple current.◆Long life of 4000 hours at 125°C.
- Adapted to the RoHS directive (2011/65/EU).
- •AEC-Q200 compliant. Please contact us for details.

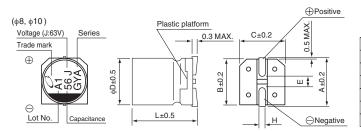


#### ■ Specifications

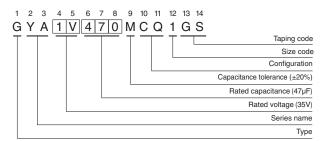
Item	Performance Characteristics								
Category Temperature Range	-55 to +125°C								
Rated Voltage Range	16 to 63V								
Rated Capacitance Range	10 to 470μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Tangent of loss angle (tan $\delta$ )	Rated voltage (V)   16   25   35   50   63   120Hz 20°C   tan δ (MAX.)   0.16   0.14   0.12   0.10   0.08								
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 (2000 hours for $\phi$ 6.3 rated at 16V) at 125°C, the peak voltage shall not exceed the rated voltage.  Capacitance change Within $\pm$ 30% of initial capacitance value $\tan \delta$ 200% or less of the initial specified value $ESR$ 200% or less of the initial specified value $ESR$ 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 1000 hours at 85°C, 85% RH.  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								
Resistance to Soldering Heat	After solderling the Capacitor, After restored at room temperature, they meet the characteristics requirements listed below.  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								
Marking	Black print on the case top.								

### ■ Dimensions





## Type numbering system (Example: 35V 47µF)



				(mm
φD×L	φ6.3×5.8	φ6.3×7.7	ф8×10	φ10×10
Α	7.3	7.3	9.0	11.0
В	6.6	6.6	8.3	10.3
С	6.6	6.6	8.3	10.3
Е	2.2	2.2	3.1	4.5
L	5.8	7.7	10.3	10.3
Н	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Volta	ge					
٧	16	25	35	50	63	
Code	С	Е	٧	Н	J	

The vibration structure-resistant product is also available upon request, please ask for details.

Design, Specifications are subject to change without notice.

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

# **GYA**

### **■**Dimensions

V (Code)  Coole  Cap.(µF)			16			25		35		50		63				
		1C			1E		1V		1H		1J					
10	100													6.3×5.8	120	700
22	220										6.3×5.8	80	750	6.3×7.7	80	900
33	330										6.3×7.7	40	1100	8×10	40	1100
47	470							6.3×5.8	60	900						
56	560				6.3×5.8	50	900							10×10	30	1400
68	680							6.3×7.7	35	1400	8×10	30	1250			
82	820	6.3×5.8	50	1000								 				
100	101				6.3×7.7	30	1400				10×10	28	1600			
150	151	6.3×7.7	30	1500				8×10	27	1600						
220	221				8×10	27	1600					 				
270	271	8×10	25	1700				10×10	20	2000						
330	331				10×10	20	2000							↓D∨I	ESR	Ripple
470	471	10×10	20	2100										φD×L	mΩ	mArms

ESR at 20°C 100kHz Rated ripple Current at 125°C 100kHz

## • Frequency coefficient of rated ripple current

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

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