

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

## GYA

Chip Type, 125°C High Reliability



NEW

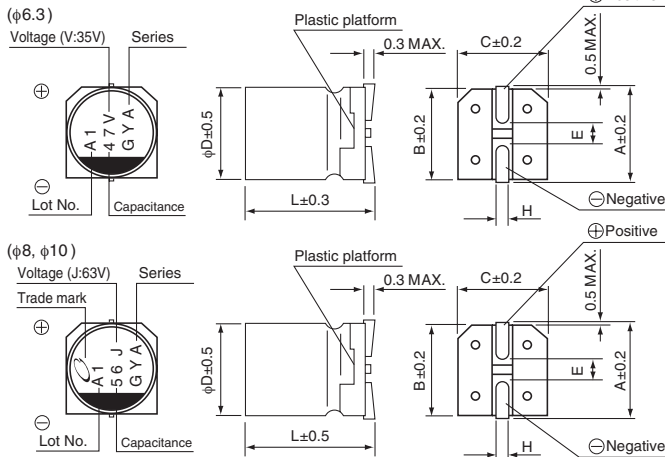


- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C.
- Adapted to the RoHS directive (2011/65/EU).

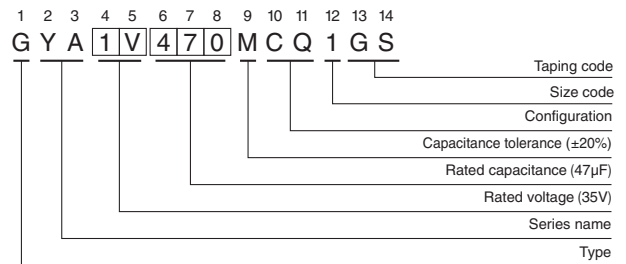
### Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	25 to 63V	
Rated Capacitance Range	10 to 330μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	120Hz 20°C	
	Rated voltage (V)	25    35    50    63
	tan δ (MAX.)	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 at 125°C, the peak voltage shall not exceed the rated voltage.	
	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
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 soldering 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	φ8 × 10	φ10 × 10
A	7.3	7.3	9.0	11.0
B	6.6	6.6	8.3	10.3
C	6.6	6.6	8.3	10.3
E	2.2	2.2	3.1	4.5
L	5.8	7.7	10.3	10.3
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Voltage				
V	25	35	50	63
Code	E	V	H	J

### Specifications

Cap. (μF)	Code	25		35		50		63			
		V	1E	1V	1H	1J	1K	1L			
10	100										
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	
100	101	6.3 × 7.7	30	1400				10 × 10	28	1600	
150	151				8 × 10	27	1600				
220	221	8 × 10	27	1600							
270	271				10 × 10	20	2000				
330	331	10 × 10	20	2000							

#### Frequency coefficient of rated ripple current

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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.

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