

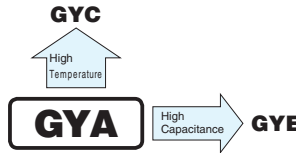
CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

GYA

Chip Type, 125°C High Reliability



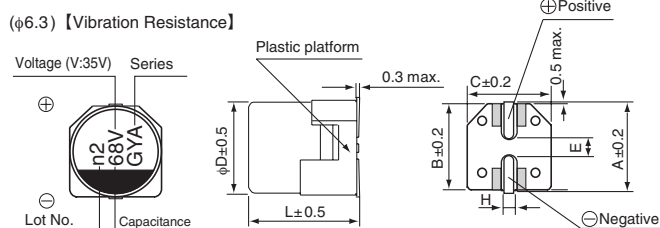
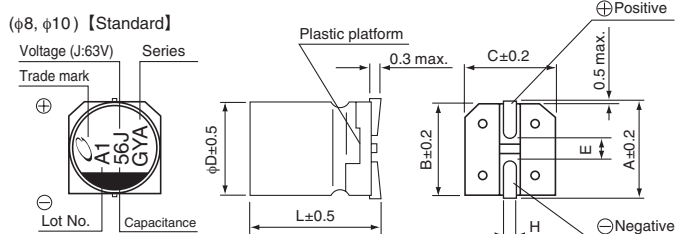
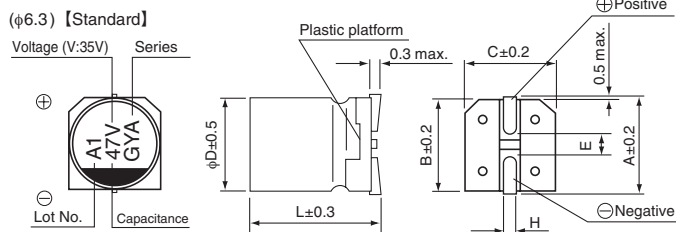
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



Specifications

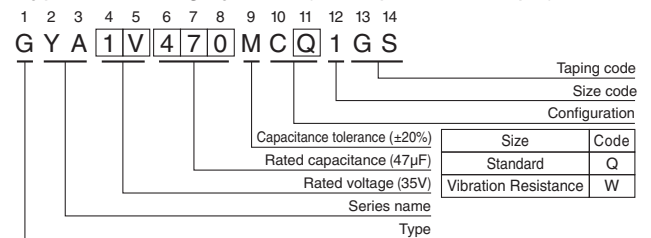
Item	Performance Characteristics							
Category Temperature Range	-55 to +125°C							
Rated Voltage Range	16 to 80V							
Rated Capacitance Range	10 to 470μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Tangent of loss angle (tan δ)	Rated voltage (V)	16	25	35	50	63	80	120Hz 20°C
	tan δ (max.)	0.16	0.14	0.12	0.10	0.08	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). 80V: After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.05CV(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					
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.	ESR	200% or less of the initial specified value					
		Leakage current	Less than or equal to the initial specified value					
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.	Capacitance change	Within ±30% of the initial capacitance value					
		tan δ	200% or less of 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.	Leakage current	Less than or equal to the initial specified value					
		Capacitance change	Within ±10% of the initial capacitance value					
Marking	Black print on the case top.	tan δ	Less than or equal to the initial specified value					
		Leakage current	Less than or equal to the initial specified value					

Dimensions



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

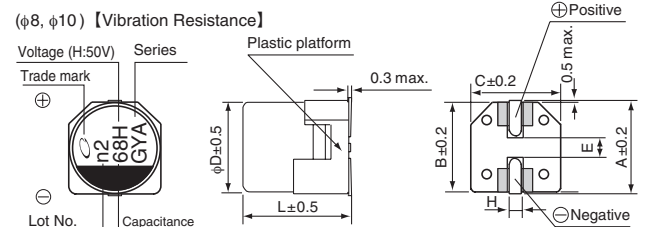
Type numbering system (Example : 35V 47μF)



Standard	(mm)					Vibration Resistance (mm)				
	6.3×5.8	6.3×7.7	8×10	10×10	10×12.5	6.3×7.7	8×10	10×10	10×12.5	
A	7.3	7.3	9.0	11.0	11.0	A	7.3	9.0	11.0	11.0
B	6.6	6.6	8.3	10.3	10.3	B	6.6	8.3	10.3	10.3
C	6.6	6.6	8.3	10.3	10.3	C	6.6	8.3	10.3	10.3
E	2.2	2.2	3.1	4.5	4.5	E	2.2	3.1	4.5	4.5
L	5.8	7.7	10.3	10.3	12.5	L	7.7	10.5	10.5	12.8
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5

● Frequency coefficient of rated ripple current

Voltage	Frequency	120Hz	1kHz	10kHz	100kHz or more		
V 16 25 35 50 63 80	Code	C	E	V	H	J	K
	Coefficient	0.15	0.40	0.75	1.00		



● Dimension table in next page.



■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mA rms) (125°C/100kHz)	Part Number
16 (1C)	82	6.3×5.8	0.16	13.12	50	1000	GYA1C820MC□1GS
	150	6.3×7.7	0.16	24.00	30	1500	GYA1C151MC□1GS
	270	8×10	0.16	43.20	25	1700	GYA1C271MC□1GS
	470	10×10	0.16	75.20	20	2100	GYA1C471MC□1GS
25 (1E)	47	6.3×5.8	0.14	11.75	50	900	GYA1E470MC□1GS
	56	6.3×5.8	0.14	14.00	50	900	GYA1E560MC□1GS
	68	6.3×7.7	0.14	17.00	30	1400	GYA1E680MC□1GS
	100	6.3×7.7	0.14	25.00	30	1400	GYA1E101MC□1GS
	150	8×10	0.14	37.50	27	1600	GYA1E151MC□1GS
	220	8×10	0.14	55.00	27	1600	GYA1E221MC□1GS
	270	10×10	0.14	67.50	20	2000	GYA1E271MC□1GS
	330	10×10	0.14	82.50	20	2000	GYA1E331MC□1GS
35 (1V)	33	6.3×5.8	0.12	11.55	60	900	GYA1V330MC□1GS
	47	6.3×5.8	0.12	16.45	60	900	GYA1V470MC□1GS
	68	6.3×7.7	0.12	23.80	35	1400	GYA1V680MC□1GS
	100	8×10	0.12	35.00	27	1600	GYA1V101MC□1GS
	150	8×10	0.12	52.50	27	1600	GYA1V151MC□1GS
	220	10×10	0.12	77.00	20	2000	GYA1V221MC□1GS
	270	10×10	0.12	94.50	20	2000	GYA1V271MC□1GS
	330	10×12.5	0.12	115.50	16	2300	GYA1V331MC□1GS
50 (1H)	22	6.3×5.8	0.10	11.00	80	750	GYA1H220MC□1GS
	33	6.3×7.7	0.10	16.50	40	1100	GYA1H330MC□1GS
	47	8×10	0.10	23.50	30	1250	GYA1H470MC□1GS
	68	8×10	0.10	34.00	30	1250	GYA1H680MC□1GS
	100	10×10	0.10	50.00	28	1600	GYA1H101MC□1GS
	120	10×10	0.10	60.00	28	1600	GYA1H121MC□1GS
	150	10×12.5	0.10	75.00	18	2000	GYA1H151MC□1GS
63 (1J)	10	6.3×5.8	0.08	6.30	120	700	GYA1J100MC□1GS
	22	6.3×7.7	0.08	13.86	80	900	GYA1J220MC□1GS
	33	8×10	0.08	20.79	40	1100	GYA1J330MC□1GS
	47	8×10	0.08	29.61	40	1100	GYA1J470MC□1GS
	56	10×10	0.08	35.28	30	1400	GYA1J560MC□1GS
	68	10×10	0.08	42.84	30	1400	GYA1J680MC□1GS
	82	10×10	0.08	51.66	30	1400	GYA1J820MC□1GS
	100	10×12.5	0.08	63.00	20	1900	GYA1J101MC□1GS
80 (1K)	22	8×10	0.08	88.00	45	1100	GYA1K220MC□1GS
	33	10×10	0.08	132.00	36	1300	GYA1K330MC□1GS
	47	10×10	0.08	188.00	36	1300	GYA1K470MC□1GS

□ : Enter the appropriate configuration code.

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

GYB

 Chip Type, 105°C High Reliability

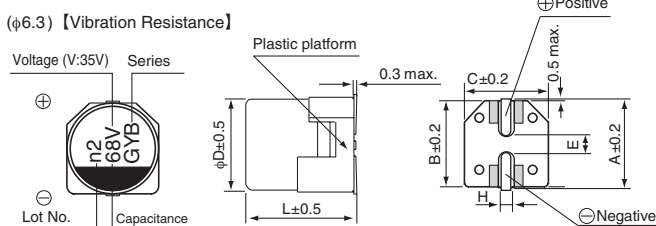
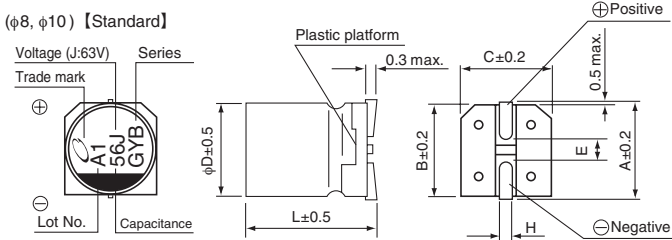
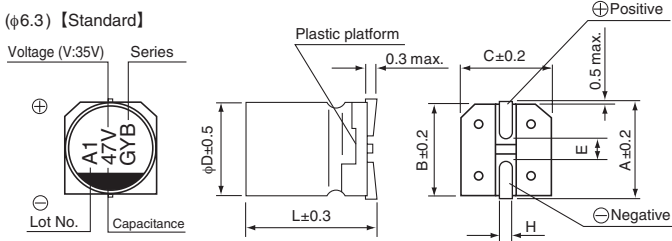

- High Reliability, Low ESR, High ripple current.
- Long life of 10000 hours at 105°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



Specifications

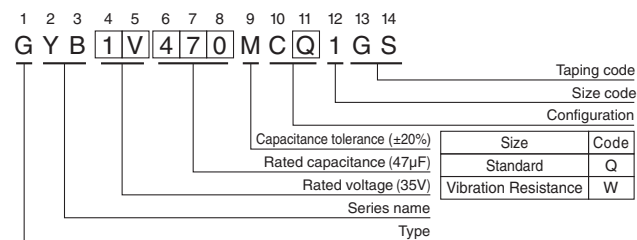
Item	Performance Characteristics	
Category Temperature Range	-55 to +105°C	
Rated Voltage Range	16 to 63V	
Rated Capacitance Range	10 to 470μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Rated voltage (V)	16 25 35 50 63
	tan δ (max.)	0.16 0.14 0.12 0.10 0.08
ESR	Less than 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 10000 hours at 105°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
Shelf Life	After storing the capacitors under no load at 105°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.	
	Capacitance change	Within ±30% of the initial capacitance value
	Leakage current	Less than or equal to the initial specified value
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.	
	Capacitance change	Within ±30% of the initial capacitance value
	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.	
	Capacitance change	Within ±10% of the initial capacitance value
	Leakage current	Less than or equal to the initial specified value
Marking	Black print on the case top.	

Dimensions



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

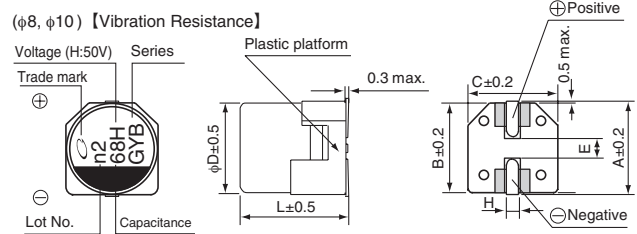
Type numbering system (Example : 35V 47μF)



	Standard (mm)					Vibration Resistance (mm)					
	φ6.3	6.3×5.8	6.3×7.7	8×10	10×10	10×12.5	φ8	6.3×7.7	8×10	10×10	10×12.5
A	7.3	7.3	9.0	11.0	11.0	7.3	9.0	11.0	11.0	11.0	11.0
B	6.6	6.6	8.3	10.3	10.3	6.6	8.3	10.3	10.3	10.3	10.3
C	6.6	6.6	8.3	10.3	10.3	6.6	8.3	10.3	10.3	10.3	10.3
E	2.2	2.2	3.1	4.5	4.5	2.2	3.1	4.5	4.5	4.5	4.5
L	5.8	7.7	10.3	10.3	12.5	7.7	10.5	10.5	12.8	12.8	12.8
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5

Frequency coefficient of rated ripple current

Voltage	V	16	25	35	50	63	Frequency	120Hz	1kHz	10kHz	100kHz or more
							Coefficient	0.15	0.40	0.75	1.00
Code	C	E	V	H	J						



● Dimension table in next page.



■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mA _{rms}) (105°C/100kHz)	Part Number
16 (1C)	82	6.3×5.8	0.16	13.12	50	1400	GYB1C820MC□1GS
	150	6.3×7.7	0.16	24.0	30	2100	GYB1C151MC□1GS
	270	8×10	0.16	43.2	25	2400	GYB1C271MC□1GS
	470	10×10	0.16	75.2	20	2600	GYB1C471MC□1GS
25 (1E)	47	6.3×5.8	0.14	11.75	50	1300	GYB1E470MC□1GS
	56	6.3×5.8	0.14	14.00	50	1300	GYB1E560MC□1GS
	68	6.3×7.7	0.14	17.00	30	2000	GYB1E680MC□1GS
	100	6.3×7.7	0.14	25.00	30	2000	GYB1E101MC□1GS
	150	8×10	0.14	37.50	27	2300	GYB1E151MC□1GS
	220	8×10	0.14	55.00	27	2300	GYB1E221MC□1GS
	270	10×10	0.14	67.50	20	2500	GYB1E271MC□1GS
	330	10×10	0.14	82.50	20	2500	GYB1E331MC□1GS
35 (1V)	470	10×12.5	0.14	117.50	16	3500	GYB1E471MC□1GS
	33	6.3×5.8	0.12	11.55	60	1300	GYB1V330MC□1GS
	47	6.3×5.8	0.12	16.45	60	1300	GYB1V470MC□1GS
	68	6.3×7.7	0.12	23.80	35	2000	GYB1V680MC□1GS
	100	8×10	0.12	35.00	27	2300	GYB1V101MC□1GS
	150	8×10	0.12	52.50	27	2300	GYB1V151MC□1GS
	220	10×10	0.12	77.00	20	2500	GYB1V221MC□1GS
	270	10×10	0.12	94.50	20	2500	GYB1V271MC□1GS
50 (1H)	330	10×12.5	0.12	115.50	16	3500	GYB1V331MC□1GS
	22	6.3×5.8	0.10	11.00	80	1100	GYB1H220MC□1GS
	33	6.3×7.7	0.10	16.50	40	1600	GYB1H330MC□1GS
	47	8×10	0.10	23.50	30	1800	GYB1H470MC□1GS
	68	8×10	0.10	34.00	30	1800	GYB1H680MC□1GS
	100	10×10	0.10	50.00	28	2000	GYB1H101MC□1GS
	120	10×10	0.10	60.00	28	2000	GYB1H121MC□1GS
63 (1J)	150	10×12.5	0.10	75.00	18	3200	GYB1H151MC□1GS
	10	6.3×5.8	0.08	6.30	120	1000	GYB1J100MC□1GS
	22	6.3×7.7	0.08	13.86	80	1500	GYB1J220MC□1GS
	33	8×10	0.08	20.79	40	1600	GYB1J330MC□1GS
	47	8×10	0.08	29.61	40	1600	GYB1J470MC□1GS
	56	10×10	0.08	35.28	30	1800	GYB1J560MC□1GS
	68	10×10	0.08	42.84	30	1800	GYB1J680MC□1GS
	82	10×10	0.08	51.66	30	1800	GYB1J820MC□1GS
100	10×12.5	0.08	63.00	20	3000	GYB1J101MC□1GS	

□ : Enter the appropriate configuration code.

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

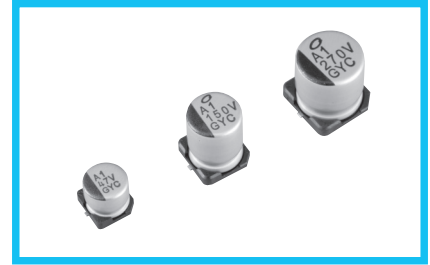
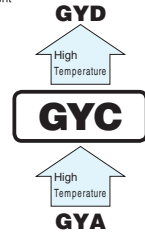
CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

GYC

Chip Type, 135°C High Reliability



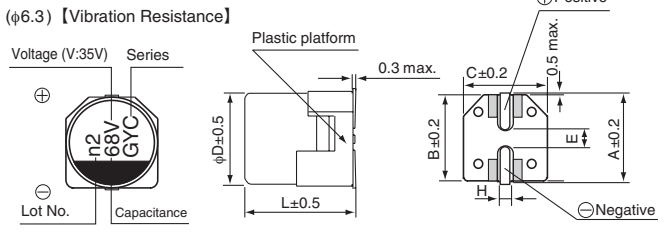
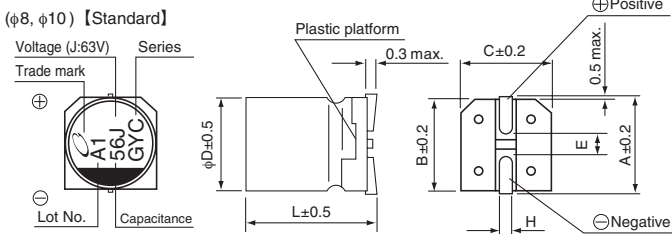
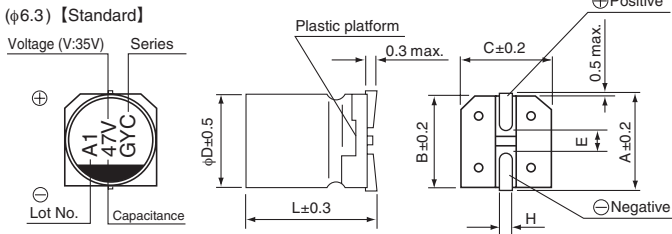
- High Reliability, Low ESR, High ripple current.
- Long life of 2000 to 4000 hours at 135°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



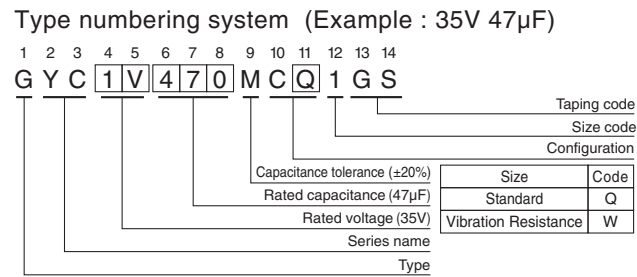
Specifications

Item	Performance Characteristics	
Category Temperature Range	-55 to +135°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 δ)	Rated voltage (V)	16 25 35 50 63
	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)	$Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$	
	$Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (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 ϕD = 6.3) at 125°C or 135°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 135°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.	
	Capacitance change	Within ±30% of the initial capacitance value
	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.	
	Capacitance change	Within ±10% of the initial capacitance value
	Leakage current	Less than or equal to the initial specified value
Marking	Black print on the case top.	

Dimensions



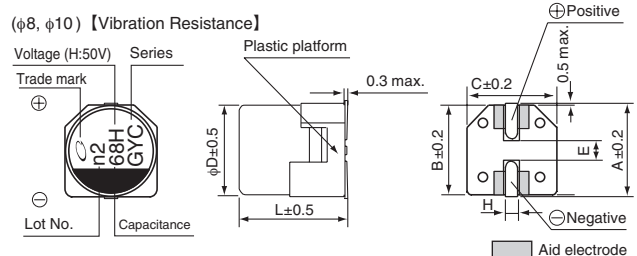
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)



Standard (mm)					Vibration Resistance (mm)					
Series	6.3x5.8	6.3x7.7	8x10	10x10	10x12.5	Series	6.3x7.7	8x10	10x10	10x12.5
A	7.3	7.3	9.0	11.0	11.0	A	7.3	9.0	11.0	11.0
B	6.6	6.6	8.3	10.3	10.3	B	6.6	8.3	10.3	10.3
C	6.6	6.6	8.3	10.3	10.3	C	6.6	8.3	10.3	10.3
E	2.2	2.2	3.1	4.5	4.5	E	2.2	3.1	4.5	4.5
L	5.8	7.7	10.3	10.3	12.5	L	7.7	10.5	10.5	12.8
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5

Frequency coefficient of rated ripple current

Voltage	Frequency				
	120Hz	1kHz	10kHz	100kHz or more	
V	16	25	35	50	63
Code	C	E	V	H	J
Coefficient	0.15	0.40	0.75	1.00	



● Dimension table in next page.



■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mArms)		Part Number
						125°C/100kHz	135°C/100kHz	
16 (1C)	82	6.3×5.8	0.16	13.12	50	1500	950	GYC1C820MC□1GS
	150	6.3×7.7	0.16	24.0	30	2000	1500	GYC1C151MC□1GS
	270	8×10	0.16	43.2	25	3100	1700	GYC1C271MC□1GS
	470	10×10	0.16	75.2	20	3400	2100	GYC1C471MC□1GS
25 (1E)	47	6.3×5.8	0.14	11.75	50	1400	900	GYC1E470MC□1GS
	56	6.3×5.8	0.14	14.00	50	1400	900	GYC1E560MC□1GS
	68	6.3×7.7	0.14	17.00	30	1900	1400	GYC1E680MC□1GS
	100	6.3×7.7	0.14	25.00	30	1900	1400	GYC1E101MC□1GS
	150	8×10	0.14	37.50	27	2900	1600	GYC1E151MC□1GS
	220	8×10	0.14	55.00	27	2900	1600	GYC1E221MC□1GS
	270	10×10	0.14	67.50	20	3300	2000	GYC1E271MC□1GS
	330	10×10	0.14	82.50	20	3300	2000	GYC1E331MC□1GS
35 (1V)	33	6.3×5.8	0.12	11.55	60	1400	900	GYC1V330MC□1GS
	47	6.3×5.8	0.12	16.45	60	1400	900	GYC1V470MC□1GS
	68	6.3×7.7	0.12	23.80	35	1900	1400	GYC1V680MC□1GS
	100	8×10	0.12	35.00	27	2900	1600	GYC1V101MC□1GS
	150	8×10	0.12	52.50	27	2900	1600	GYC1V151MC□1GS
	220	10×10	0.12	77.00	20	3300	2000	GYC1V221MC□1GS
	270	10×10	0.12	94.50	20	3300	2000	GYC1V271MC□1GS
	330	10×12.5	0.12	115.50	16	3500	2300	GYC1V331MC□1GS
50 (1H)	22	6.3×5.8	0.10	11.00	80	1100	750	GYC1H220MC□1GS
	33	6.3×7.7	0.10	16.50	40	1600	1100	GYC1H330MC□1GS
	47	8×10	0.10	23.50	30	2200	1250	GYC1H470MC□1GS
	68	8×10	0.10	34.00	30	2200	1250	GYC1H680MC□1GS
	100	10×10	0.10	50.00	28	2600	1600	GYC1H101MC□1GS
	120	10×10	0.10	60.00	28	2600	1600	GYC1H121MC□1GS
	150	10×12.5	0.10	75.00	18	3200	2000	GYC1H151MC□1GS
63 (1J)	10	6.3×5.8	0.08	6.30	120	1000	700	GYC1J100MC□1GS
	22	6.3×7.7	0.08	13.86	80	1300	900	GYC1J220MC□1GS
	33	8×10	0.08	20.79	40	1900	1100	GYC1J330MC□1GS
	47	8×10	0.08	29.61	40	1900	1100	GYC1J470MC□1GS
	56	10×10	0.08	35.28	30	2300	1400	GYC1J560MC□1GS
	68	10×10	0.08	42.84	30	2300	1400	GYC1J680MC□1GS
	82	10×10	0.08	51.66	30	2300	1400	GYC1J820MC□1GS
	100	10×12.5	0.08	63.00	20	3000	1900	GYC1J101MC□1GS

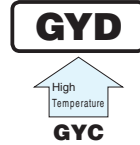
□ : Enter the appropriate configuration code.

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

GYD Chip Type, 150°C High Reliability



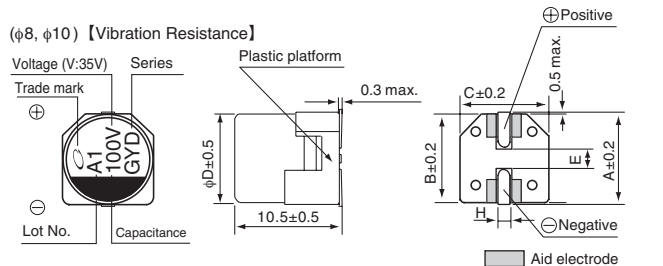
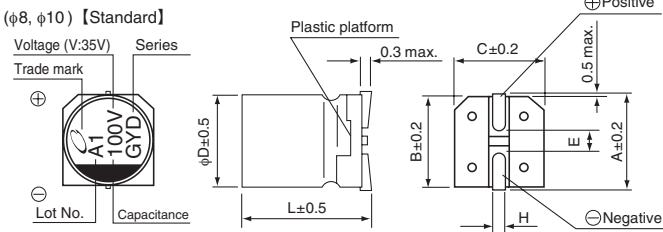
- High Reliability, Low ESR, High ripple current.
- Long life of 1000 hours at 150°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



■ Specifications

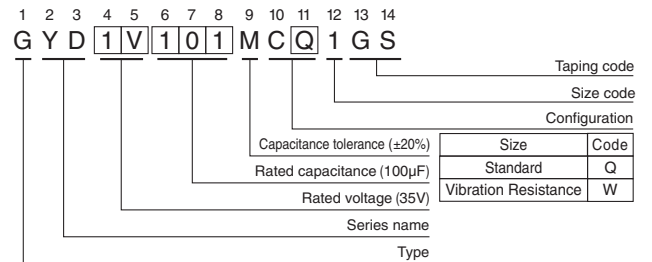
Item	Performance Characteristics	
Category Temperature Range	-55 to +150°C	
Rated Voltage Range	25 to 35V	
Rated Capacitance Range	100 to 270μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Rated voltage (V)	25 35
	tan δ (max.)	0.14 0.12
ESR	Less than or equal to the specified 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 1000 hours at 150°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
Shelf Life	After storing the capacitors under no load at 150°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.	
	Capacitance change	Within±30% of the initial capacitance value
	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.	
	Capacitance change	Within±10% of the initial capacitance value
	Leakage current	Less than or equal to the initial specified value
Marking	Black print on the case top.	

■ Dimensions



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

Type numbering system (Example : 35V 100μF)



Standard	(mm)		Voltage	Vibration Resistance (mm)		
	φD×L	8×10		10×10	φD×L	8×10
A	9.0	11.0	V 25 35 Code E V	A	9.0	11.0
B	8.3	10.3		B	8.3	10.3
C	8.3	10.3	C	8.3	10.3	
E	3.1	4.5	E	3.1	4.5	
L	10.3	10.3	L	10.5	10.5	
H	0.8 to 1.1	0.8 to 1.1	H	1.1 to 1.5	1.1 to 1.5	

● 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.



■ Dimensions

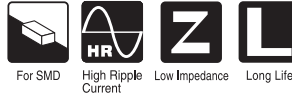
Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mA _{rms}) (150°C/100kHz)	Part Number
25 (1E)	150	8×10	0.14	37.5	27	1400	GYD1E151MC□1GS
	270	10×10	0.14	67.5	20	1800	GYD1E271MC□1GS
35 (1V)	100	8×10	0.12	35.0	27	1400	GYD1V101MC□1GS
	150	10×10	0.12	52.5	20	1800	GYD1V151MC□1GS

□ : Enter the appropriate configuration code.

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

GYE Chip Type, 125°C High Reliability



Expanded

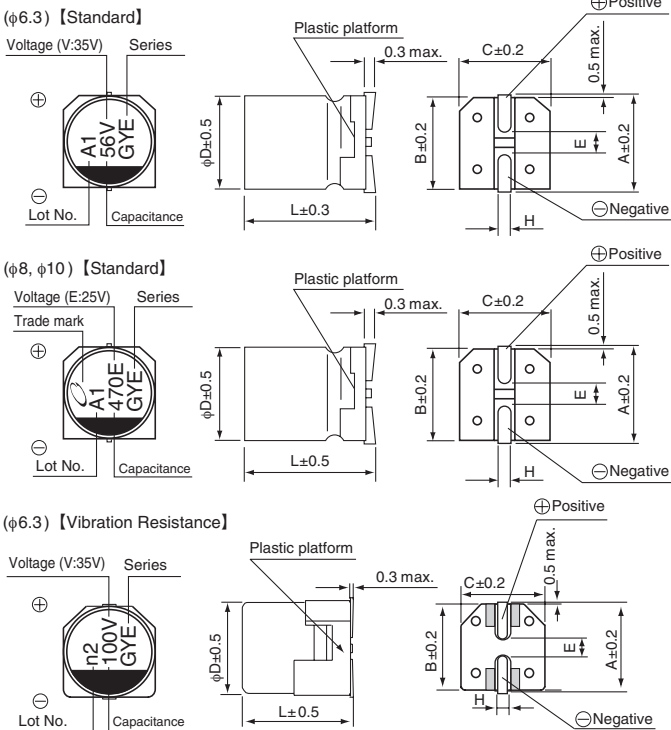
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



Specifications

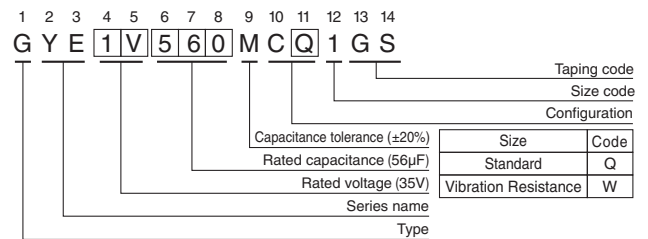
Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	16 to 63V	
Rated Capacitance Range	56 to 680μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Rated voltage (V)	16 25 35 50 63
	tan δ (max.)	0.16 0.14 0.12 0.10 0.08
ESR	Less than 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 at 125°C, the peak voltage shall not exceed the rated voltage.	Capacitance change
		tan δ
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.	ESR
		Leakage current
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.	Capacitance change
		tan δ
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.	Leakage current
		Capacitance change
Marking	Black print on the case top.	tan δ
		Leakage current

Dimensions



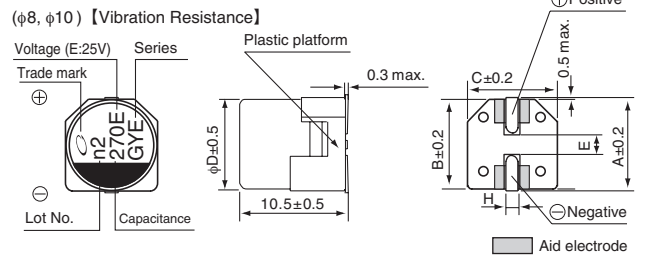
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Type numbering system (Example : 35V 56μF)



Standard		(mm)	
φD	φD	φD	φD
A	6.3	5.8	6.3
B	6.6	6.6	8.3
C	6.6	6.6	8.3
E	2.2	2.2	3.1
L	5.8	7.7	10.3
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1

Voltage	
V	Code
16	C
25	E
35	V
50	H
63	J



● Dimension table in next page.

● Frequency coefficient of rated ripple current

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

GYE

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mArms) (125°C/100kHz)	Part Number
16 (1C)	120	6.3×5.8	0.16	19.20	50	1100	GYE1C121MC□1GS
	180	6.3×7.7	0.16	28.80	30	1800	GYE1C181MC□1GS
	390	8×10	0.16	62.40	25	2000	GYE1C391MC□1GS
	680	10×10	0.16	108.80	20	2800	GYE1C681MC□1GS
25 (1E)	68	6.3×5.8	0.14	17.0	50	1100	GYE1E680MCQ1GS
	82	6.3×5.8	0.14	20.5	50	1100	GYE1E820MCQ1GS
	150	6.3×7.7	0.14	37.5	30	1700	GYE1E151MC□1GS
	270	8×10	0.14	67.5	27	2000	GYE1E271MC□1GS
	470	10×10	0.14	117.5	20	2800	GYE1E471MC□1GS
	560	10×12.5	0.14	140.00	16	3500	GYE1E561MC□1GS
35 (1V)	56	6.3×5.8	0.12	19.6	60	1100	GYE1V560MCQ1GS
	100	6.3×7.7	0.12	35.0	35	1700	GYE1V101MC□1GS
	180	8×10	0.12	63.0	27	2000	GYE1V181MC□1GS
	330	10×10	0.12	115.5	20	2800	GYE1V331MC□1GS
	390	10×12.5	0.12	136.50	16	3500	GYE1V391MC□1GS
50 (1H)	82	8×10	0.10	41.00	30	1700	GYE1H820MC□1GS
	150	10×10	0.10	75.00	28	2000	GYE1H151MC□1GS
	180	10×12.5	0.10	90.00	18	3000	GYE1H181MC□1GS
63 (1J)	56	8×10	0.08	35.28	40	1700	GYE1J560MC□1GS
	100	10×10	0.08	63.00	30	2000	GYE1J101MC□1GS
	120	10×12.5	0.08	75.60	20	3000	GYE1J121MC□1GS

□ : Enter the appropriate configuration code.

Blue : New product (as of October 2023)

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

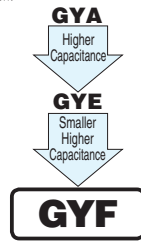
GYF

Chip Type, 125°C High Reliability



Expanded

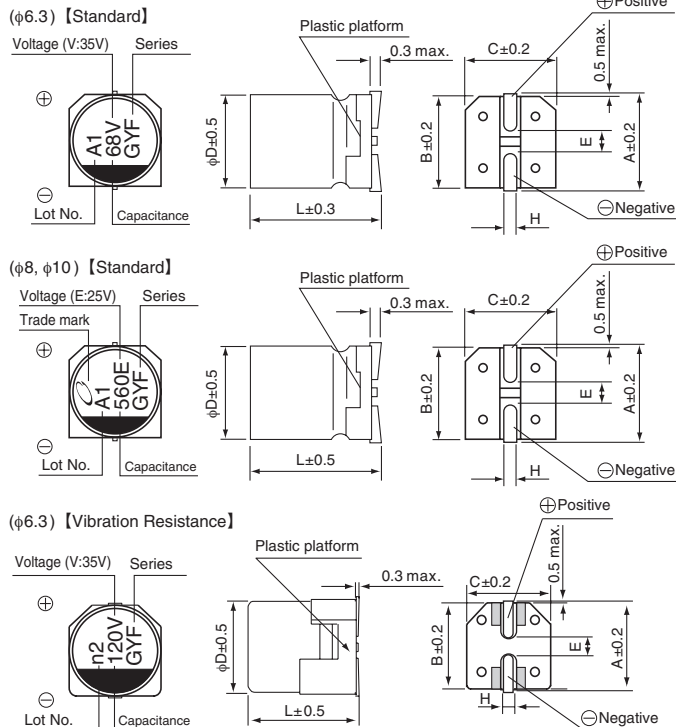
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.



Specifications

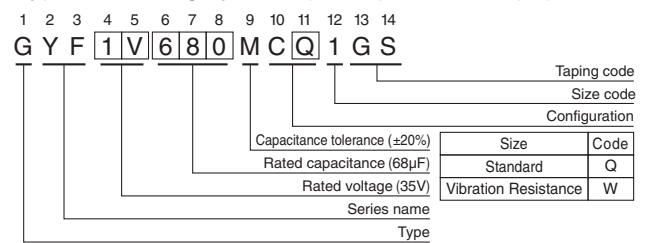
Item	Performance Characteristics	
Category Temperature Range	-55 to +125°C	
Rated Voltage Range	16 to 63V	
Rated Capacitance Range	68 to 1000μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Tangent of loss angle (tan δ)	Rated voltage (V)	16 25 35 50 63
	tan δ (max.)	0.16 0.14 0.12 0.10 0.08
ESR	Less than 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 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
	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.	
	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
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.	
	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
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.	
	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

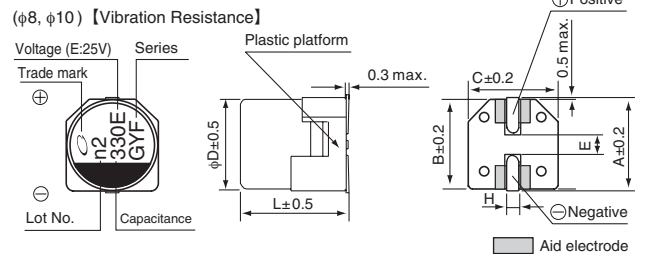


※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Type numbering system (Example : 35V 68μF)



Standard				Voltage				Vibration Resistance (mm)						
φD	6.3×5.8	6.3×7.7	8×10	10×10	V	16	25	35	50	63	φD	6.3×7.7	8×10	10×10
A	7.3	7.3	9.0	11.0	C	E	V	H	J		A	7.3	9.0	11.0
B	6.6	6.6	8.3	10.3							B	6.6	8.3	10.3
C	6.6	6.6	8.3	10.3							C	6.6	8.3	10.3
E	2.2	2.2	3.1	4.5							E	2.2	3.1	4.5
L	5.8	7.7	10.3	10.3							L	7.7	10.5	10.5
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1							H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5



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.

GYF

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) max. (20°C/100kHz)	Rated Ripple (mA rms) (125°C/100kHz)	Part Number
16 (1C)	180	6.3×5.8	0.16	28.80	50	1100	GYF1C181MCQ1GS
	270	6.3×7.7	0.16	43.20	30	1800	GYF1C271MC□1GS
	560	8×10	0.16	89.60	25	2000	GYF1C561MC□1GS
	1000	10×10	0.16	160.00	20	2800	GYF1C102MC□1GS
25 (1E)	100	6.3×5.8	0.14	25.0	50	1300	GYF1E101MCQ1GS
	180	6.3×7.7	0.14	45.0	30	1800	GYF1E181MC□1GS
	330	8×10	0.14	82.5	27	2000	GYF1E331MC□1GS
	560	10×10	0.14	140.0	20	2800	GYF1E561MC□1GS
35 (1V)	68	6.3×5.8	0.12	23.8	60	1200	GYF1V680MCQ1GS
	120	6.3×7.7	0.12	42.0	35	1700	GYF1V121MC□1GS
	220	8×10	0.12	77.0	27	2000	GYF1V221MC□1GS
	390	10×10	0.12	136.5	20	2800	GYF1V391MC□1GS
50 (1H)	100	8×10	0.10	50.00	30	1700	GYF1H101MC□1GS
	180	10×10	0.10	90.00	28	2000	GYF1H181MC□1GS
63 (1J)	68	8×10	0.08	42.84	40	1700	GYF1J680MC□1GS
	120	10×10	0.08	75.60	30	2000	GYF1J121MC□1GS

□ : Enter the appropriate configuration code.

Blue : New product (as of October 2023)

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.