

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS **nichicon**

## GYF

Chip Type, 125°C High Reliability



**NEW**

- 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 compliant. Please contact us for details.

**GYE**

Smaller  
Higher  
Capacitance

**GYF**

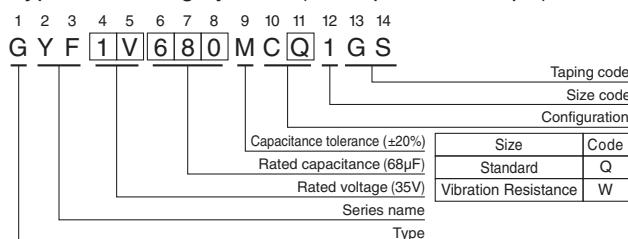


### ■ Specifications

Item	Performance Characteristics						
Category Temperature Range	-55 to +125°C						
Rated Voltage Range	25 to 35V						
Rated Capacitance Range	68 to 560μF						
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)	$Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$ $Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (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 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 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					
	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.						

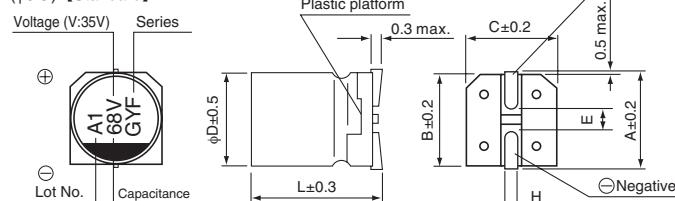
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

### Type numbering system (Example : 35V 68μF)

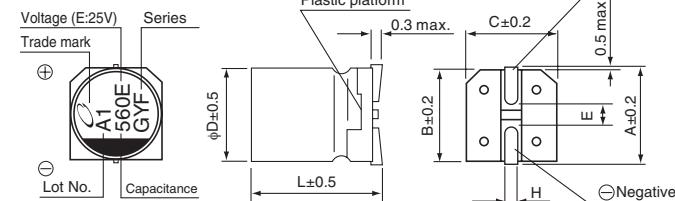


### ■ Dimensions

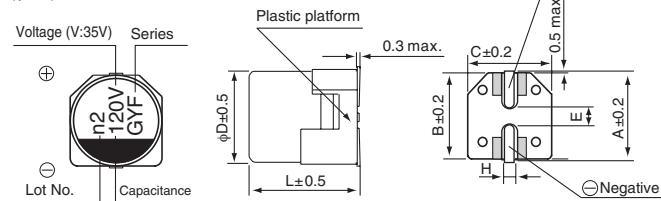
#### (φ6.3) [Standard]



#### (φ8, φ10) [Standard]



#### (φ6.3) [Vibration Resistance]



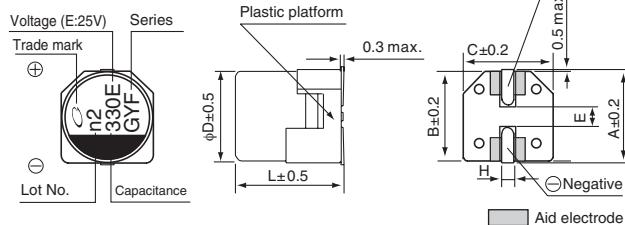
#### Standard

	6.3x5.8	6.3x7.7	8x10	10x10
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

#### Vibration Resistance (mm)

	6.3x7.7	8x10	10x10
A	7.3	9.0	11.0
B	6.6	8.3	10.3
C	6.6	8.3	10.3
E	2.2	3.1	4.5
L	7.7	10.5	10.5
H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5

#### (φ8, φ10) [Vibration Resistance]



### ● 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 ( $\mu$ F)	Case Size $\phi$ D×L(mm)	$\tan \delta$	Leakage Current ( $\mu$ A) (at 20°C after 2 minutes)	ESR(mΩ)max. (20°C/100kHz)	Rated Ripple (mArms) (125°C/100kHz)	Part Number
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

□ : 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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Nichicon\(尼吉康\)](#)