

GYF

Chip Type, 135°C High Reliability



For SMD



High Ripple Current



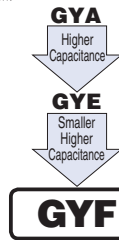
Low Impedance



Long Life

Expanded

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



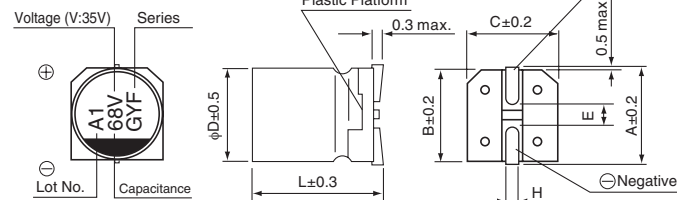
Specifications

Item	Performance Characteristics						
Category Temperature Range	-55 to +135°C						
Rated Voltage Range	16 to 80V						
Rated Capacitance Range	33 to 1800μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Tangent of loss angle (tan δ)	Rated voltage (V)	16	25	35	50	63	80
	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 or 135°C (φ6.3: 2000 hours at 135°C, 4000 hours at 125°C), the peak voltage shall not exceed the rated voltage.						
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.						
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.						
Marking	Black print on the case top.						

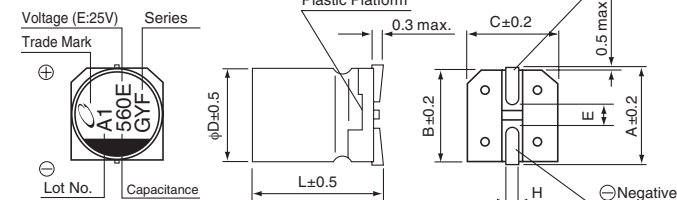
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Dimensions

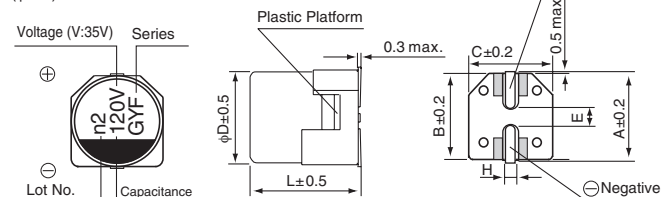
(φ6.3) 【Standard】



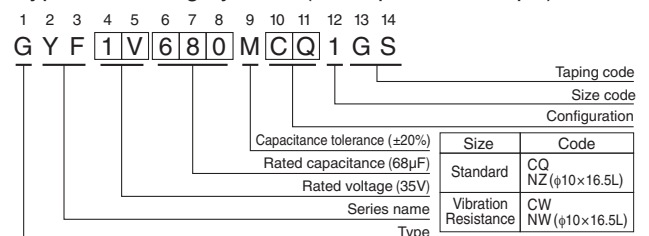
(φ8, φ10) 【Standard】



(φ6.3) 【Vibration Resistance】



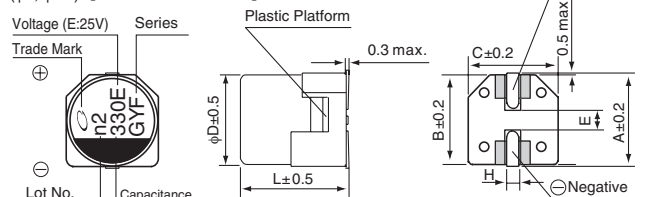
Type numbering system (Example : 35V 68μF)



Standard (mm)						Vibration Resistance (mm)					
φ6.3	6.3	7.3	8.0	10.0	12.5	16.5	φ6.3	6.3	7.3	8.0	10.0
A	7.3	7.3	9.0	11.0	11.0	11.0	A	7.3	9.0	11.0	11.0
B	6.6	6.6	8.3	10.3	10.3	10.3	B	6.6	8.3	10.3	10.3
C	6.6	6.6	8.3	10.3	10.3	10.3	C	6.6	8.3	10.3	10.3
E	2.2	2.2	3.1	4.5	4.5	4.5	E	2.2	3.1	4.5	4.5
L	5.8	7.7	10.3	10.3	12.5	16.5	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	1.1 to 1.5	1.1 to 1.5	H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5

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

(φ8, φ10) 【Vibration Resistance】



● 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)		Part Number
						125°C/ 100kHz	135°C/ 100kHz	
16 (1C)	180	6.3×5.8	0.16	28.8	50	1100	700	GYF1C181MC□1GS
	270	6.3×7.7	0.16	43.2	30	1800	1100	GYF1C271MC□1GS
	560	8×10	0.16	89.6	25	2000	1200	GYF1C561MC□1GS
	1000	10×10	0.16	160.0	20	2800	1700	GYF1C102MC□1GS
	1200	10×12.5	0.16	192.0	15	3500	2100	GYF1C122MC□1GS
	1800	10×16.5	0.16	288.0	12	4000	2400	GYF1C182MN□1GS
25 (1E)	100	6.3×5.8	0.14	25.0	50	1300	800	GYF1E101MC□1GS
	180	6.3×7.7	0.14	45.0	30	1800	1100	GYF1E181MC□1GS
	330	8×10	0.14	82.5	27	2000	1200	GYF1E331MC□1GS
	560	10×10	0.14	140.0	20	2800	1700	GYF1E561MC□1GS
	680	10×12.5	0.14	170.0	16	3500	2100	GYF1E681MC□1GS
	1000	10×16.5	0.14	250.0	12	4000	2400	GYF1E102MN□1GS
35 (1V)	68	6.3×5.8	0.12	23.8	60	1200	700	GYF1V680MC□1GS
	120	6.3×7.7	0.12	42.0	35	1700	1000	GYF1V121MC□1GS
	220	8×10	0.12	77.0	27	2000	1200	GYF1V221MC□1GS
	390	10×10	0.12	136.5	20	2800	1700	GYF1V391MC□1GS
	470	10×12.5	0.12	164.5	16	3500	2100	GYF1V471MC□1GS
	680	10×16.5	0.12	238.0	12	4000	2400	GYF1V681MN□1GS
50 (1H)	47	6.3×7.7	0.10	23.5	40	1400	900	GYF1H470MC□1GS
	100	8×10	0.10	50.0	30	1700	1000	GYF1H101MC□1GS
	180	10×10	0.10	90.0	28	2000	1200	GYF1H181MC□1GS
	220	10×12.5	0.10	110.0	18	3000	1800	GYF1H221MC□1GS
	270	10×16.5	0.10	135.0	14	3700	2200	GYF1H271MN□1GS
63 (1J)	33	6.3×7.7	0.08	20.7	80	1100	700	GYF1J330MC□1GS
	68	8×10	0.08	42.8	40	1700	1000	GYF1J680MC□1GS
	120	10×10	0.08	75.6	30	2000	1200	GYF1J121MC□1GS
	150	10×12.5	0.08	94.5	20	3000	1800	GYF1J151MC□1GS
	180	10×16.5	0.08	113.4	15	3500	2100	GYF1J181MN□1GS
80 (1K)	33	8×10	0.08	132.0	43	1400	800	GYF1K330MC□1GS
	56	10×10	0.08	224.0	34	1700	1000	GYF1K560MC□1GS
	68	10×12.5	0.08	272.0	24	2800	1600	GYF1K680MC□1GS
	100	10×16.5	0.08	400.0	16	3500	2100	GYF1K101MN□1GS

□ : Enter the appropriate configuration code.

Blue : New product (as of October 2026)

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