

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

GYE

 Chip Type, 125°C High Reliability

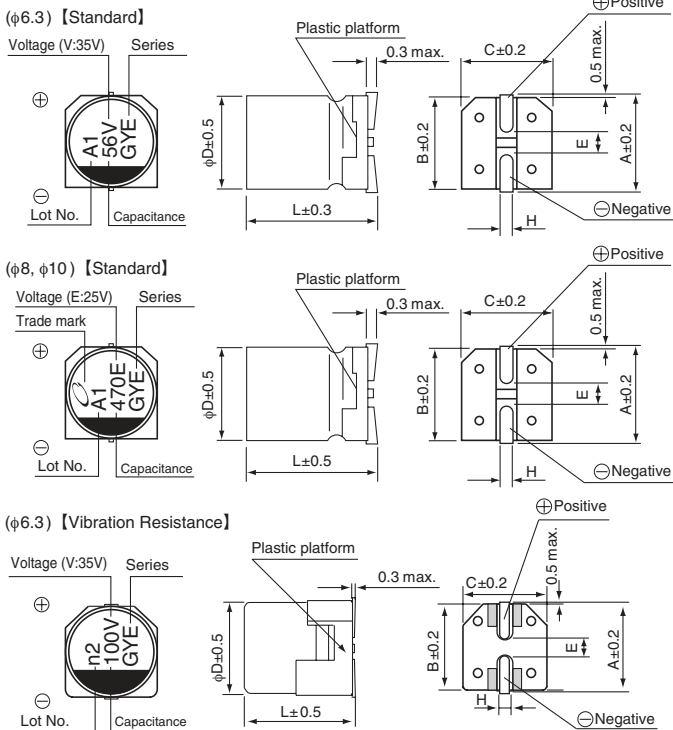

- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



Specifications

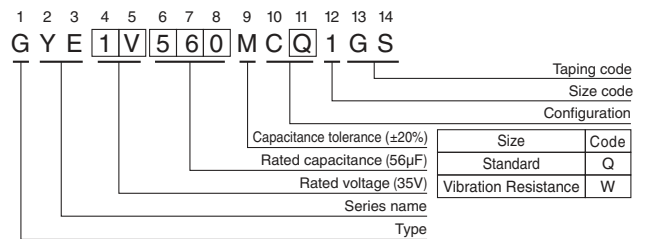
Item	Performance Characteristics			
Category Temperature Range	-55 to +125°C			
Rated Voltage Range	25 to 35V			
Rated Capacitance Range	56 to 470μF			
Capacitance Tolerance	±20% at 120Hz, 20°C			
Tangent of loss angle (tan δ)	Rated voltage (V)	25 35		
	tan δ (max.)	0.14 0.12		
ESR	Less than or equal 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)	$Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$ $Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (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
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.			
	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.			
	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

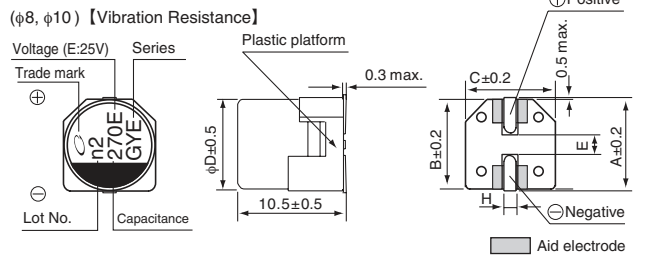


※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Type numbering system (Example : 35V 56μF)



Standard	(mm)				Voltage	Code	V	E	V	Vibration Resistance (mm)				
	6.3x5.8	6.3x7.7	8x10	10x10						φ6.3	6.3x7.7	8x10	10x10	
A	7.3	7.3	9.0	11.0	V 25 35	E V	L	7.7	10.5	10.5	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



● 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 (mA rms) (125°C/100kHz)	Part Number
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
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

□ : 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.