nichicon

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

GYD Chip Type, 150°C High Reliability

For SMD | High Ripple Current | Low Impedance | Long Life | Anti-Solvent Feature

NEW



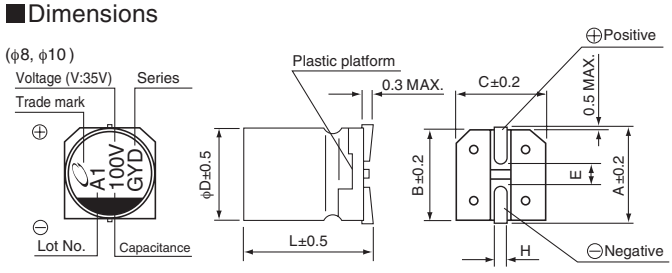
- High Reliability, Low ESR,High ripple current.
- Long life of 1000 hours at 150°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

GYD ← High Temperature → GYC

■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 — 120Hz 20°C
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 Leakage current: Less than or equal to 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 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.

■Dimensions



Type numbering system (Example : 35V 100µF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
G	Y	D	1	V	1	0	1	M	C	Q	1	G	S

Taping code
Size code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (100µF)
Rated voltage (35V)
Series name
Type

■Dimensions

Cap.(µF) \ V		25			35		
Code		1E			1V		
100	101				8 × 10	27	1400
150	151	8 × 10	27	1400	10 × 10	20	1800
220	221				Case size φD × L (mm)	ESR mΩ	Ripple mArms
270	271	10 × 10	20	1800			

ESR at 20°C 100kHz
Rated ripple Current at 150°C 100kHz

(mm)

φD×L	φ8 × 10	φ10 × 10
A	9.0	11.0
B	8.3	10.3
C	8.3	10.3
E	3.1	4.5
L	10.3	10.3
H	0.8 to 1.1	0.8 to 1.1

Voltage

V	25	35
Code	E	V

※ The vibration structure-resistant product is also available upon request, please ask for details.

● Frequency coefficient of rated ripple current

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

Design, Specifications are subject to change without notice.

Mouser Electronics

Authorized Distributor

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Nichicon:
GYD1E151MCQ1GS GYD1E151MCW1GS GYD1E271MCQ1GS GYD1E271MCW1GS GYD1V101MCQ1GS GYD1V101MCW1GS GYD1V151MCQ1GS GYD1V151MCW1GS