

- Long life, Low impedance aluminium electrolytic capacitor **RYA** series.
- For surface mount 150 deg.C, 1000hours guaranteed.
- For vibration resistance.

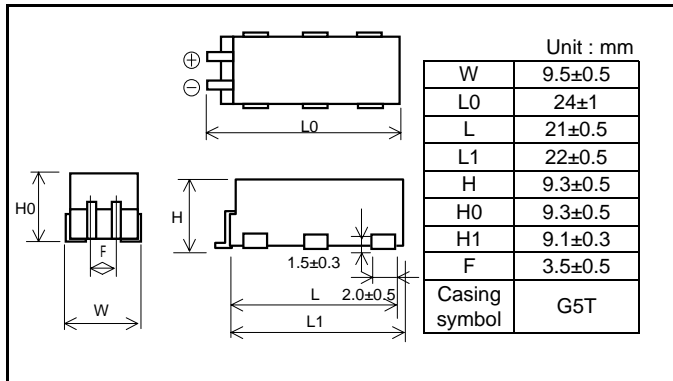
■ Spec sheet

Item	Performance																
Category temperature range (deg C)	-40 to +150																
Tolerance at rated capacitance (%)	-20 to +20 (20deg C,120Hz)																
Leakage current (μA)	Less than 0.02CV (after 2minutes) C:Rated capacitance (μF), V:Rated voltage (V) (20deg C)																
Tangent of loss angle	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>Tangent of loss angle</td> <td>0.24</td> <td>0.20</td> <td>0.19</td> <td>0.18</td> </tr> </table>	Rated voltage (V)	25	35	50	63	Tangent of loss angle	0.24	0.20	0.19	0.18						
	Rated voltage (V)	25	35	50	63												
Tangent of loss angle	0.24	0.20	0.19	0.18													
(20deg C,120Hz)																	
Characteristics at high and low temperature	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td rowspan="2">Impedance ratio</td> <td>Z₂₅/Z_{+20 C}</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z₄₀/Z_{+20 C}</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> </table>	Rated voltage (V)	25	35	50	63	Impedance ratio	Z ₂₅ /Z _{+20 C}	3	3	3	3	Z ₄₀ /Z _{+20 C}	5	5	5	5
	Rated voltage (V)	25	35	50	63												
Impedance ratio	Z ₂₅ /Z _{+20 C}	3	3	3	3												
	Z ₄₀ /Z _{+20 C}	5	5	5	5												
Coefficient of frequency for Rated Ripple Current	<table border="1"> <tr> <td>Frequency (kHz)</td> <td>0.12</td> <td>1</td> <td>10</td> <td>100</td> </tr> <tr> <td>coefficient</td> <td>0.50</td> <td>0.77</td> <td>0.88</td> <td>1.00</td> </tr> </table>	Frequency (kHz)	0.12	1	10	100	coefficient	0.50	0.77	0.88	1.00						
	Frequency (kHz)	0.12	1	10	100												
coefficient	0.50	0.77	0.88	1.00													
Endurance(150deg C) Applied ripple current	Test time	1000hours															
	Leakage current	The initial specific value or less															
	Capacitance change	Within -30% to +30% of initial value															
	Tangent of loss angle	300% or less of the initial specified value															
	Impedance (Max.)	Please see attached "Standard Ratings"															
Shelf life(150deg C)	Test time : 500hours;other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-18																
Applicable standards	JIS C5101-1, -18 1998(IEC 60384-1 1992, -18 1993)																

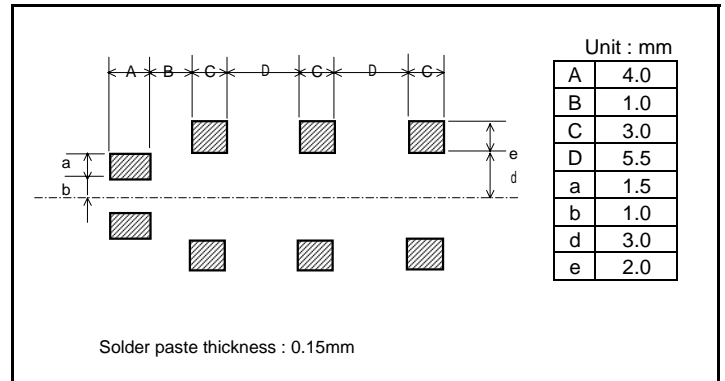
■ Pert numbering system

Standard Type	RYA	-	25	V	221	M	G5T	-	-	FL
	Series code		Rated voltage sybol		Rated capacitance sybol	Capacitance tolerance symbol	Casing symbol		Additional symbol	Taping polarity symbol
Lead free type	RYA	-	25	V	221	M	G5T	-	U	FL
	Series code		Rated voltage sybol		Rated capacitance sybol	Capacitance tolerance symbol	Casing symbol		Additional symbol	Taping polarity symbol

■ Outline drawing



■ Recommended land pattern size



(Note) Design, Specifications are subject to change without notice.
(Note) Ask factory for technical specifications before purchase and/or use.

TENTATIVE**ELNA****HORIZONTAL TYPE CHIP ALUMINIUM ELECTROLYTIC CAPACITORS****EA-1701EF(2/2)****Standard Ratings**

Rated voltage(V) Rated capacitance(uF) Item	25				35				50				63			
	Case (mm)		Impedance (ohm)	Rated ripple current (mAmps)	Case (mm)		Impedance (ohm)	Rated ripple current (mAmps)	Case (mm)		Impedance (ohm)	Rated ripple current (mAmps)	Case (mm)		Impedance (ohm)	Rated ripple current (mAmps)
	W	L			W	L			W	L			W	L		
			Initial	After Endurance			Initial	After Endurance			Initial	After Endurance			Initial	After Endurance
33	--	--	-----	-----	--	--	-----	-----	--	--	-----	-----	9.5	24	0.33	166
															1.65	
47	--	--	-----	-----	--	--	-----	-----	9.5	24	0.26	187	--	--	-----	-----
											1.3					
100	--	--	-----	-----	9.5	24	0.22	204	--	--	-----	-----	--	--	-----	-----
							1.1									
220	9.5	24	0.22	204	--	--	-----	-----	--	--	-----	-----	--	--	-----	-----
			1.1													

(Note) Rated ripple current : 150 degC, 100kHz ; Impedance : 20 degC, 100kHz

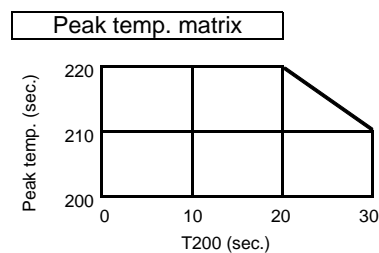
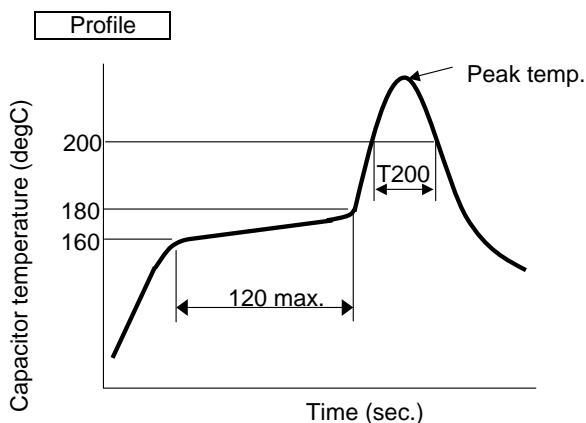
Recommended soldering condition (Pb-free reflow soldering)**(1) Methods**

See the following

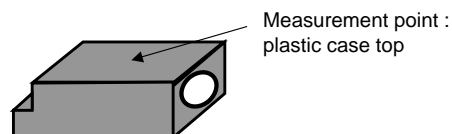
methods	Reflow soldering	Soldering iron	Flow soldering
Advisability	○	○	×

(2) Soldering iron conditions

Iron tip temperature shall be 400degC +5/-5degC within the duration of 3 +1/-0 seconds.

(3) Reflow soldering conditions

T200:Duration while capacitor head temperature exceeds 200degC (sec.)
The measurement temperature point is the plastic top.



- (1)Preheating shall be under 180 degC within 120 seconds.
- (2)Peak temperature shall be within the peak temperature matrix.
- (3)Reflow soldering is max. two times. (Interval time more than 1 hour)
- (4)For conditions exceeding the tolerances, consult with us.

(Note) Design, Specifications are subject to change without notice.

(Note) Ask factory for technical specifications before purchase and/or use.

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