

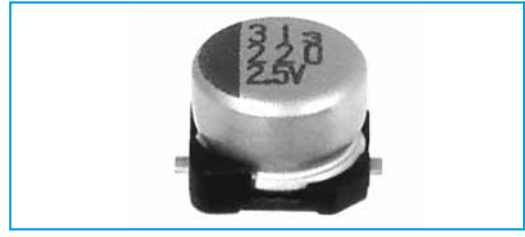
ALUMINIUM

POLYMER HYBRID

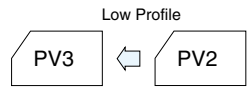
105°C

Chip Type GREEN CAP SMD Low ESR 105°C 1000hours Anti-cleaning solvent

- 4.0mm height
- Super low ESR and high ripple current are realized.
- Guaranteed 105°C, 1000 hours.



Marking color : Blue print



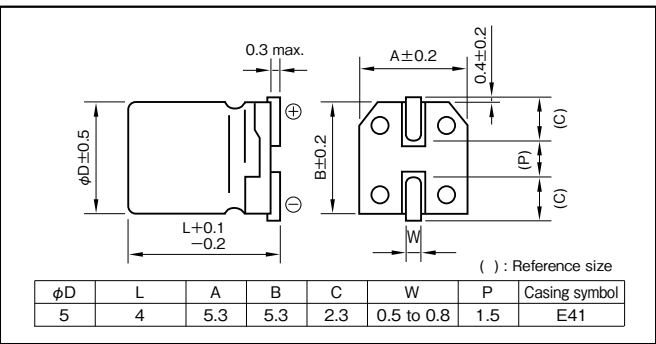
Specifications

Item	Performance			
Category temperature range (°C)	-55 to +105			
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)			
Leakage current (µA) *Note	Less than 700µA (after 2 minutes) (20°C)			
Tangent of the loss angle (tanδ)	Less than 0.12 (20°C,120Hz)			
Characteristics at high and low temperature	Impedance ratio (max.)			
	<table border="1"> <tr> <td>Z-25°C/Z+20°C</td> <td>1.15</td> </tr> <tr> <td>Z-55°C/Z+20°C</td> <td>1.25</td> </tr> </table> (100kHz)	Z-25°C/Z+20°C	1.15	Z-55°C/Z+20°C
Z-25°C/Z+20°C	1.15			
Z-55°C/Z+20°C	1.25			
Endurance (105°C) (Applied ripple current)	Test time	1000 hours		
	Leakage current	The initial specified value or less		
	Percentage of capacitance change	Within ±20% of initial value		
	Tangent of the loss angle	150% or less of the initial specified value		
	ESR change	150% or less of the initial specified value		
Bias Humidity 60°C, 90 to 95%RH	Test time	500 hours		
	Leakage current	The initial specified value or less		
	Percentage of capacitance change	Within ±20% of initial value		
	Tangent of the loss angle	150% or less of the initial specified value		
	ESR change	150% or less of the initial specified value		
Characteristics of applied surge voltage	The capacitors shall be subject to 1000 cycles each consisting of charge with the surge voltage specified at 105°C for 30 seconds through a protective resistor (Rc=1kΩ) in 6 minutes per cycle. Surge voltage : 1.15 times of rated voltage			
	Leakage current	The initial specified value or less		
	Percentage of capacitance change	Within ±20% of initial value		
	Tangent of the loss angle	150% or less of the initial specified value		
	ESR change	150% or less of the initial specified value		
Failure tare	0.5% per 1000 hours maximum (Confidence level 60% at 105°C)			

*Note : If any doubt arises, measure the leakage current after following voltage application treatment.
Voltage application treatment : DC rated voltage are applied to the capacitors for 120 minutes at 105°C.

Outline Drawing

Unit : mm



- Soldering conditions are described on page 15.
- Land pattern size are described on page 13.
- The taping specifications are described on page 16.

Part numbering system (example : 2.5V220µF)

PV3	—	2R5	V	221	M	E41	—	
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol

Standard Ratings

Rated voltage (V) Rated capacitance (µF)	Item	2.5			6.3		
		Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φ D × L (mm)	(mΩ max.)	(mA rms)	φ D × L (mm)	(mΩ max.)	(mA rms)	
150	—	—	—	5 × 4.0	25	2700	
220	5 × 4.0	25	3300	—	—	—	

(Note) Rated ripple current : 105°C , 100kHz ; ESR : 20°C , 100kHz

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