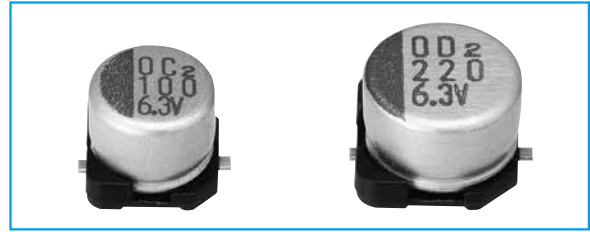
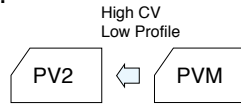


## Chip Type

- GREEN CAP
- SMD
- Low ESR
- 105°C 2000hours
- Anti-cleaning solvent

- 4.5mm height
- Super low ESR and high ripple current are realized.
- Guaranteed 105°C, 2000 hours.



Marking color : Blue print

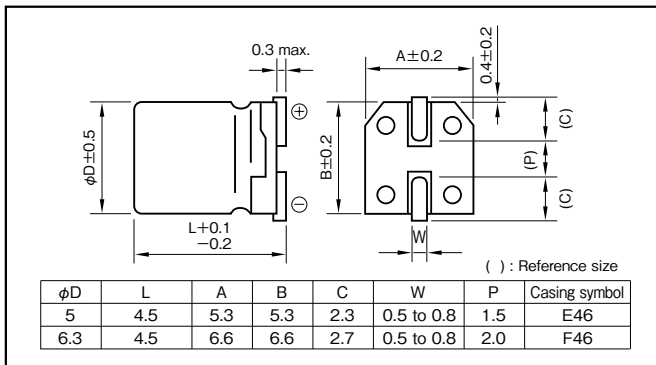
## Specifications

Item	Performance	
Category temperature range (°C)	-55 to +105	
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)	
Leakage current (μA) *Note	Rated voltage (V)	2.5 to 20
	Leakage current (μA)	Less than 0.2 CV (after 2 minutes)
	Less than 0.5 CV (after 2 minutes)	
C : Rated capacitance (μF), V : Rated voltage (V) (20°C)		
Tangent of the loss angle (tanδ)	Less than 0.12 (20°C, 120Hz)	
Characteristics at high and low temperature	Impedance ratio (max.)	Z-25°C/Z+20°C
		Z-55°C/Z+20°C
(100kHz)		
Endurance (105°C) (Applied ripple current)	Test time	2000 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 rate	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 : 4V120μF)					
PV2	—	4	V	121	M E46
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol
					Casing symbol
					Taping symbol

Standard Ratings

Rated voltage (V) Item	2.5			4			6.3			10			16		
	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )
39	—	—	—	—	—	—	—	—	—	—	—	—	6.3×4.5	40	1450
100	—	—	—	—	—	—	5×4.5	20	1300	—	—	—	—	—	—
120	—	—	—	5×4.5	20	1400	—	—	—	6.3×4.5	30	1750	—	—	—
150	—	—	—	—	—	—	6.3×4.5	16	1950	—	—	—	—	—	—
180	5×4.5	20	1400	—	—	—	—	—	—	—	—	—	—	—	—
220	—	—	—	6.3×4.5	16	2400	6.3×4.5	16	1950	—	—	—	—	—	—
270	6.3×4.5	16	2400	—	—	—	—	—	—	—	—	—	—	—	—
330	6.3×4.5	13	2400	—	—	—	—	—	—	—	—	—	—	—	—
390	6.3×4.5	16	2400	—	—	—	—	—	—	—	—	—	—	—	—

Rated voltage (V) Item	20			25		
	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )	φD×L (mm)	(mΩ max.)	(mA <sub>rms</sub> )
15	—	—	—	6.3×4.5	45	1150
22	6.3×4.5	45	1250	—	—	—

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

ALUMINUM

POLYMER  
HYBRID

105°C