

OCRU Series

Features

- 125°C, 1000 ~ 2,000 hours assured
- Ultra low ESR with large permissible ripple current
- RoHS compliant



Marking color: Blue

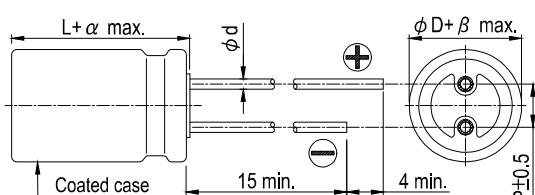
Specifications

Items	Performance				
Category Temperature Range	-55°C ~ +125°C				
Capacitance Tolerance	± 20%	(at 120 Hz, 20°C)			
Leakage Current (at 20°C)*	Rated voltage applied, after 2 minutes at 20°C. See Standard Ratings				
Tanδ (at 120 Hz, 20°C)	See Standard Ratings				
ESR (at 100k ~ 300k Hz, 20°C)	See Standard Ratings				
Endurance	Test Time	1,000 Hrs for 2.5 ~ 4V; 2,000 Hrs for 6.3~ 20V			
	Capacitance Change	Within ± 20% of initial value			
	Tanδ	Less than 200% of specified value			
	ESR	Less than 200% of specified value			
	Leakage Current	Within specified value			
* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for specified hours at 125°C.					
Moisture Resistance	Test Time	1,000 Hrs			
	Capacitance Change	Within ± 20% of initial value			
	Tanδ	Less than 150% of specified value			
	ESR	Less than 150% of specified value			
	Leakage Current	Within specified value			
* The above specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, 90 ~ 95% RH for 1,000 hours. Leakage current should be tested voltage treatment*.					
Resistance to Soldering Heat * (Please refer to page 18 for soldering conditions)	Capacitance Change	Within ± 10% of initial value			
	Tanδ	Within specified value			
	ESR	Within specified value			
	Leakage Current	Within specified value			
Ripple Current and Frequency Multipliers	Frequency (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k
	Multiplier	0.05	0.3	0.7	1.0

* For any doubt about measured values, measure the leakage current again after the following voltage treatment.

Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

Diagram of Dimensions

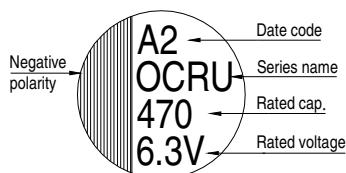


Lead Spacing and Diameter

	8	10
ϕ D		
L	11.5	12
P	3.5	5.0
ϕ d		0.6
α		1.0
β		0.5

Unit: mm

Marking



Dimension: ϕ D×L(mm)

Ripple Current: mA/rms at 100k Hz

Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μ F)	Size ϕ D×L(mm)	Tan δ (120 Hz, 20°C)	L C (μ A)	E S R (m Ω /at 100k ~ 300k Hz, 20°C max.)	Rated R. C.(mA/rms at 100k Hz)	
							T \leq 105°C	105°C $<$ T \leq 125°C
2.5V (0E)	2.9	680	8 × 11.5	0.18	340	13	4,520	1,430
		1,200	10 × 12	0.18	600	13	5,440	1,721
4V (0G)	4.6	560	8 × 11.5	0.18	448	13	4,520	1,430
		1,200	10 × 12	0.18	960	12	5,440	1,721
6.3V (0J)	7.2	470	8 × 11.5	0.15	592	15	4,210	1,332
		820	10 × 12	0.15	1,033	12	5,440	1,721
10V (1A)	12.0	330	8 × 11.5	0.12	660	16	3,950	1,250
		560	10 × 12	0.12	1,120	13	5,230	1,655
16V (1C)	18.0	180	8 × 11.5	0.12	576	18	3,640	1,151
		330	10 × 12	0.12	1,056	16	4,720	1,493
20V (1D)	23.0	100	8 × 11.5	0.15	400	24	3,320	1,050
		150	10 × 12	0.15	600	20	4,320	1,367

Part Numbering System

OCRU Series	470 μ F	\pm 20%	6.3V	Bulk Package	Gas Type	8 ϕ × 11.5L	General Purpose
ORU	471	M	0J	BK	-	0811	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Application

Note: For more details, please refer to "Part Numbering System" on page 20.