OCRU Series

Features

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

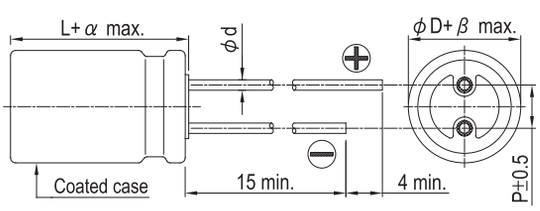
Marking color: Blue

Specifications

Items	Performance
Category Temperature Range	-55℃ ~ +125℃
Capacitance Tolerance	±20% (at 120 Hz, 20℃)
Leakage Current (at 20℃)*	Rated voltage applied, after 2 minutes at 20℃. See Standard Ratings
Tanδ (at 120 Hz, 20℃)	See Standard Ratings
ESR (at 100k ~ 300k Hz, 20℃)	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℃ after the rated voltage applied for specified hours at 125℃.
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℃ after subjecting them at 60℃, 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 ℃.

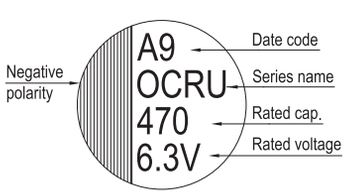
Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

φD	8	10
L	11.5	12
P	3.5	5.0
φd	0.6	
α	1.0	
β	0.5	

Marking



Dimension: ϕD×L(mm)

Standard Ratings

Ripple Current: mA/rms at 100k Hz

Rated Volt. (V)	Surge Voltage (V)	Capacitance (μF)	Size ϕD×L(mm)	Tanδ (120 Hz, 20℃)	L C (μA)	E S R (mΩ/at 100k ~ 300k Hz, 20℃ max.)	Rated R. C.(mA/rms at 100k Hz)	
							T ≤ 105℃	105℃ < T ≦ 125℃
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	470μF	±20%	6.3V	Bulk Package	Gas Type	8ϕ×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.