

# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

# URZ

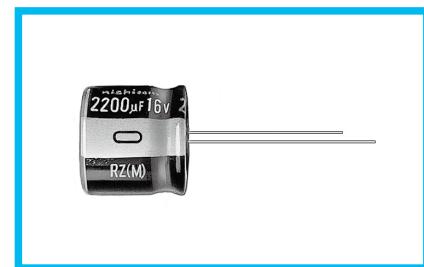
Compact & Low-Profile Sized,  
Wide Temperature Range



- Wide temperature range and same size as URS.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

**URZ**

High  
Temperature  
**URS**

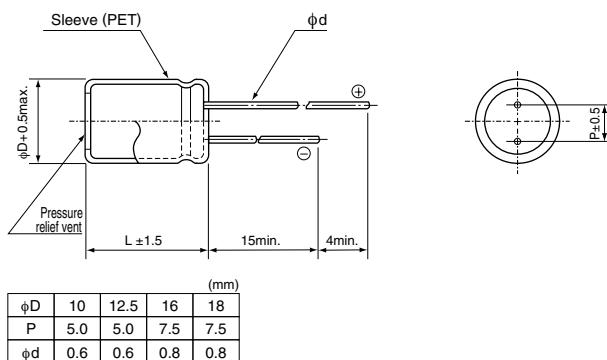


## ■ Specifications

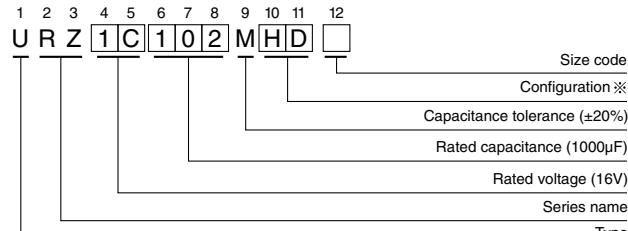
Item	Performance Characteristics												
Category Temperature Range	-55 to +105°C												
Rated Voltage Range	16 to 100V												
Rated Capacitance Range	47 to 6800μF												
Capacitance Tolerance	±20% at 120Hz, 20°C												
Leakage Current *	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV(μA). After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV(μA).												
Tangent of loss angle (tan δ)	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. Rated voltage (V) 16 25 35 50 63 100 tan δ (max.) 0.20 0.16 0.14 0.12 0.10 0.08												
	Measurement frequency : 120Hz at 20°C												
Stability at Low Temperature	Rated voltage (V) 16 25 35 50 63 100 Impedance ratio (max.) Z(-25°C) / Z(+20°C) 3 2 2 2 2 2 Z(-40°C) / Z(+20°C) 6 4 3 3 3 3												
	Measurement frequency : 120Hz												
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.												
	<table border="1" style="width: 100%;"> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>							Capacitance change	Within ±20% of the initial capacitance value	tan δ	200% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value
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tan δ	200% or less than the initial specified value												
Leakage current	Less than or equal to the initial specified value												
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.												
Marking	Printed with white color letter on black sleeve.												

\* I : Leakage Current(μA), C : Rated Capacitance(μF), V : Rated Voltage(V)

## ■ Radial Lead Type



## Type numbering system (Example : 16V 1000μF)



\* Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 to 18	HD

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## • Frequency coefficient of rated ripple current

Cap.(μF)	Frequency	50Hz	120Hz	300Hz	1 kHz	10kHz or more
47		0.75	1.00	1.35	1.57	2.00
100 to 470		0.80	1.00	1.23	1.34	1.50
1000 to 6800		0.85	1.00	1.10	1.13	1.15

• Dimension table in next page.

CAT.8100N

**URZ**

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D×L(mm)	tan $\delta$	Leakage Current ( $\mu$ A)		Rated Ripple (mArms) (105°C/120Hz)	Part Number
				at 20°C after 1 minute	at 20°C after 2 minutes		
16 (1C)	1000	12.5×12.5	0.20	480	160	520	URZ1C102MHD
	2200	16×15	0.22	1056	352	830	URZ1C222MHD
	3300	18×15	0.24	1584	528	1050	URZ1C332MHD
	4700	18×20	0.26	2256	752	1260	URZ1C472MHD
	6800	18×25	0.30	3264	1088	1560	URZ1C682MHD
25 (1E)	470	10×12.5	0.16	352.5	117.5	370	URZ1E471MPD
	1000	12.5×15	0.16	750	250	590	URZ1E102MHD
	2200	18×15	0.18	1650	550	970	URZ1E222MHD
	3300	18×20	0.20	2475	825	1220	URZ1E332MHD
	4700	18×25	0.22	3525	1175	1470	URZ1E472MHD
35 (1V)	330	10×12.5	0.14	346.5	115.5	340	URZ1V331MPD
	470	12.5×12.5	0.14	493.5	164.5	420	URZ1V471MHD
	1000	16×15	0.14	1050	350	720	URZ1V102MHD
	2200	18×20	0.16	2310	770	1110	URZ1V222MHD
50 (1H)	220	10×12.5	0.12	330	110	290	URZ1H221MPD
	330	12.5×12.5	0.12	495	165	370	URZ1H331MHD
	470	16×15	0.12	705	235	540	URZ1H471MHD
	1000	18×20	0.12	1500	500	830	URZ1H102MHD
63 (1J)	220	12.5×12.5	0.10	415.8	138.6	335	URZ1J221MHD
	330	12.5×15	0.10	623.7	207.9	510	URZ1J331MHD
	470	16×15	0.10	888.3	296.1	640	URZ1J471MHD
100 (2A)	47	10×12.5	0.08	141	47	165	URZ2A470MPD
	100	12.5×15	0.08	300	100	265	URZ2A101MHD
	220	16×15	0.08	660	220	440	URZ2A221MHD
	330	18×15	0.08	990	330	540	URZ2A331MHD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).  
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.