

UCS2C331MHD Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	UCS2C331MHD-DG
Manufacturer	Nichicon
Manufacturer Product Number	UCS2C331MHD
Description	CAP ALUM 330UF 20% 160V RADIAL
Detailed Description	330 μ F 160 V Aluminum Electrolytic Capacitors Radial, Can 10000 Hrs @ 105°C

This model UCS2C331MHD is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

UC52C331MHD

Series:

UCS

Capacitance:

330 μ F

Voltage - Rated:

160 V

Lifetime @ Temp.:

10000 Hrs @ 105°C

Polarization:

Polar

Applications:

General Purpose

Ripple Current @ High Frequency:

3.13 A @ 100 kHz

Size / Dimension:

0.709" Dia (18.00mm)

Surface Mount Land Size:

-

Package / Case:

Radial, Can

Manufacturer:

Nichicon

Product Status:

Active

Tolerance:

\pm 20%

ESR (Equivalent Series Resistance):

-

Operating Temperature:

-40°C ~ 105°C

Ratings:

-

Ripple Current @ Low Frequency:

1.565 A @ 120 Hz

Lead Spacing:

0.295" (7.50mm)

Height - Seated (Max):

1.299" (33.00mm)

Mounting Type:

Through Hole

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8532.22.0020

Moisture Sensitivity Level (MSL):

Not Applicable

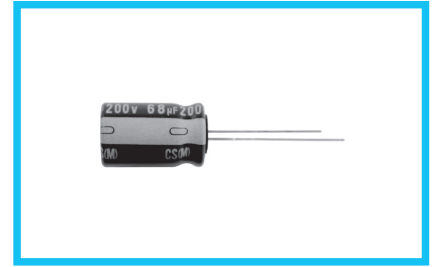
ECCN:

EAR99

ALUMINUM ELECTROLYTIC CAPACITORS



Miniature Sized, High Ripple Current,
High Reliability



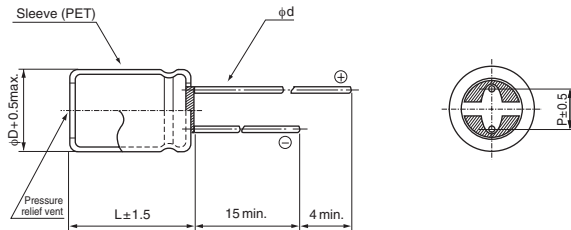
- High ripple current and Long Life product withstanding load life of 8000 to 10000 hours at +105°C.
- Suited for power supply and ballast application.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

Specifications

Item	Performance Characteristics																						
Category Temperature Range	-40 to +105°C																						
Rated Voltage Range	160 to 450V																						
Rated Capacitance Range	6.8 to 330µF																						
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 0.04CV+100 (µA)																						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C																						
	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tan δ (max.)</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>	Rated voltage (V)	160	200	250	350	400	450	tan δ (max.)	0.20	0.20	0.20	0.24	0.24	0.24								
Rated voltage (V)	160	200	250	350	400	450																	
tan δ (max.)	0.20	0.20	0.20	0.24	0.24	0.24																	
Stability at Low Temperature	Measurement frequency : 120Hz																						
	<table border="1"> <thead> <tr> <th colspan="2">Rated voltage (V)</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance ratio (max.)</td> <td>Z(-25°C) / Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> <td>6</td> </tr> <tr> <td>Z(-40°C) / Z(+20°C)</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>-</td> </tr> </tbody> </table>	Rated voltage (V)		160	200	250	350	400	450	Impedance ratio (max.)	Z(-25°C) / Z(+20°C)	3	3	3	5	5	6	Z(-40°C) / Z(+20°C)	6	6	6	6	6
Rated voltage (V)		160	200	250	350	400	450																
Impedance ratio (max.)	Z(-25°C) / Z(+20°C)	3	3	3	5	5	6																
	Z(-40°C) / Z(+20°C)	6	6	6	6	6	-																
Endurance	<p>The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 10000 hours (8000 hours for φD × L=10 × 16, 10 × 20) at 105°C, the peak voltage shall not exceed the rated voltage.</p> <table border="1"> <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																
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																						
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 dark brown sleeve.																						

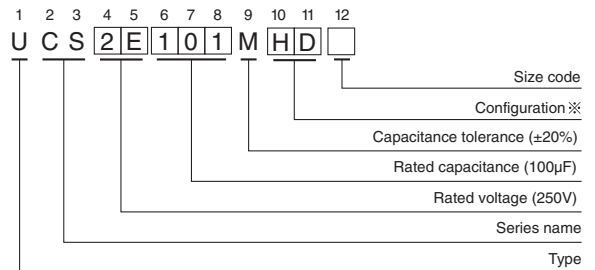
※ I : Leakage Current (µA), C : Rated Capacitance (µF), V : Rated Voltage (V)

Radial Lead Type



	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.8	0.8

Type numbering system (Example : 250V 100µF)



※ 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

Frequency	50Hz	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.40	0.50	0.80	0.90	1.00

● Dimension table in next page.

ALUMINUM ELECTROLYTIC CAPACITORS

UCS

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
160 (2C)	10	10×16	0.20	164	320	UCS2C100MPD
	22	10×20	0.20	240.8	500	UCS2C220MPD
	33	10×20	0.20	311.2	650	UCS2C330MPD
	47	10×20	0.20	400.8	750	UCS2C470MPD
	68	12.5×20	0.20	535.2	1180	UCS2C680MHD
	82	12.5×20	0.20	624.8	1275	UCS2C820MHD
	100	12.5×25	0.20	740	1420	UCS2C101MHD
	100	16×20	0.20	740	1420	UCS2C101MHD6
	150	16×20	0.20	1060	1890	UCS2C151MHD
	220	16×25	0.20	1508	2370	UCS2C221MHD
330	18×30.5	0.20	2212	3130	UCS2C331MHD	
200 (2D)	10	10×16	0.20	180	320	UCS2D100MPD
	22	10×20	0.20	276	500	UCS2D220MPD
	33	10×20	0.20	364	650	UCS2D330MPD
	47	12.5×20	0.20	476	980	UCS2D470MHD
	68	12.5×20	0.20	644	1300	UCS2D680MHD
	82	16×20	0.20	756	1380	UCS2D820MHD
	100	16×20	0.20	900	1420	UCS2D101MHD
	150	16×25	0.20	1300	1890	UCS2D151MHD
	220	18×25	0.20	1860	2365	UCS2D221MHD
	330	18×35.5	0.20	2740	3220	UCS2D331MHD
250 (2E)	10	10×20	0.20	200	350	UCS2E100MPD
	22	10×20	0.20	320	500	UCS2E220MPD
	33	12.5×20	0.20	430	800	UCS2E330MHD
	47	12.5×20	0.20	570	980	UCS2E470MHD
	68	16×20	0.20	780	1300	UCS2E680MHD
	82	16×20	0.20	920	1380	UCS2E820MHD
	100	16×25	0.20	1100	1530	UCS2E101MHD
	150	18×25	0.20	1600	1940	UCS2E151MHD
	220	18×30.5	0.20	2300	3130	UCS2E221MHD
	350 (2V)	6.8	10×16	0.24	195.2	280
10		10×20	0.24	240	350	UCS2V100MPD
22		12.5×20	0.24	408	650	UCS2V220MHD
33		16×20	0.24	562	900	UCS2V330MHD
47		16×20	0.24	758	1080	UCS2V470MHD
68		16×25	0.24	1052	1400	UCS2V680MHD
68		18×20	0.24	1052	1375	UCS2V680MHD6
82		18×25	0.24	1248	1530	UCS2V820MHD
100		18×25	0.24	1500	1575	UCS2V101MHD

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.

ALUMINUM ELECTROLYTIC CAPACITORS

UCS

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	$\tan \delta$	Leakage Current (μ A) (at 20°C after 1 minute)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
400 (2G)	6.8	10 \times 16	0.24	208.8	280	UCS2G6R8MPD
	10	10 \times 20	0.24	260	350	UCS2G100MPD
	15	12.5 \times 20	0.24	340	550	UCS2G150MHD
	22	12.5 \times 20	0.24	452	760	UCS2G220MHD
	33	16 \times 20	0.24	628	900	UCS2G330MHD
	47	16 \times 25	0.24	852	1180	UCS2G470MHD
	47	18 \times 20	0.24	852	1180	UCS2G470MHD6
	68	18 \times 25	0.24	1188	1470	UCS2G680MHD
	82	18 \times 25	0.24	1412	1525	UCS2G820MHD
450 (2W)	6.8	10 \times 20	0.24	222.4	280	UCS2W6R8MPD
	10	12.5 \times 20	0.24	280	450	UCS2W100MHD
	15	12.5 \times 25	0.24	370	600	UCS2W150MHD
	22	16 \times 20	0.24	496	730	UCS2W220MHD
	33	16 \times 25	0.24	694	980	UCS2W330MHD
	33	18 \times 20	0.24	694	980	UCS2W330MHD6
	47	18 \times 25	0.24	946	1200	UCS2W470MHD
	68	18 \times 30.5	0.24	1324	1575	UCS2W680MHD

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.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.