## CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

# nichicon



#### Specifications

Item	Performance Characteristics										
Category Temperature Range	-55 to +125°C										
Rated Voltage Range	16 to 50V										
Rated Capacitance Range	2 to 390µF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Tangent of loss angle (tan $\delta$ )	Less than or equal to the specified value at 120Hz, 20°C										
ESR (% 1)	Less than or equal to the specified value at 100kHz, 20°C										
Leakage Current (%2)	Less than or equal to the specified value. After 2 minutes' app	lication of rated voltage	at 20°C								
Temperature Characteristics (Max.Impedance Ratio)	$Z+125^{\circ}C/Z+20^{\circ}C \leq 1.25$ (100kHz) Z-55^{\circ}C/Z+20^{\circ}C \leq 1.25										
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 3000 hours at 125°C.	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Within ± 20% of initial value (**3) 150% or less of the initial specified value 150% or less of the initial specified value Less than or equal to the initial specified value								
Damp Heat (Steady State)	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 60°C, 90% RH.	Capacitance change tan δ ESR (% 1) Leakage current (% 2)	Within ± 20% of initial value (*3)   150% or less of the initial specified value   150% or less of the initial specified value   Less than or equal to the initial specified value								
Resistance to Soldering Heat	After soldering the capacitor under the soldering conditions prescribed here as preheat at 150 to 200°C for 60 to 180 seconds and peak temperature at 265°C for 10 seconds or less, the capacitor shall meet the specifications listed at right, provided that its temperature profile is measured at both of terminal ends facing the soldering side.	Capacitance change tan $\delta$ ESR ( $\approx$ 1) Leakage current ( $\approx$ 2)	Within ± 10% of the initial capacitance value (*3) 130% or less than the initial specified value 130% or less than the initial specified value Less than or equal to the initial specified value								
Marking	Navy blue print on the case top										

% 1 ESR should be measured at both of the terminal ends closest to the capacitor body.

\*2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

%3 Initial value : The value before test of examination of resistance to soldering.

#### Dimensions



			(mm)	)							
Size	φ8 × 9L	φ8 × 12L	φ10 × 13L								
φD	8.0	8.0	10.0		Voltage						
L	8.5	11.5	12.5		V	16	20	25	35	50	Ĺ
Р	3.5	3.5	5.0		v	-	20	20	00	00	
φq	0.6	0.6	0.6		Code	С	D	E	V	н	Ĺ

Please refer to page 20 about the end seal configuration.

### Type numbering system (Example : $35V 39\mu F$ )



#### • Frequency coefficient of rated ripple current

Frequency	120Hz	1kHz	10kHz	100kHz or more		
Coefficient	0.05	0.30	0.70	1.00		

CAT.8100H



### Dimensions

Rated Voltage (V)(code)	Surge Voltage (V)	Rated Capacitance (µF)	Case Size øD × L (mm)	tan ð	Leakage Current (µA)	ESR (mΩ) (at 100kHz 20°C)	Rated Ripple (mArms)		Part Number
							≦105℃ ( <b>*</b> 3)	105℃< ≦125℃ (*3)	r arr rumber
		150	8×9	0.12	480	26	2100	810	PLX1C151MCL1
16 (1C)	18.4	220	8×12	0.12	704	25	2400	930	PLX1C221MDL1
()		390	10 × 13	0.12	1248	23	2900	1130	PLX1C391MDL1
	23.0	120	8×9	0.12	480	27	2000	800	PLX1D121MCL1
20 (1D)		150	8×12	0.12	600	26	2300	910	PLX1D151MDL1
()		270	10 × 13	0.12	1080	24	2800	1110	PLX1D271MDL1
	28.7	82	8×9	0.12	410	28	2000	780	PLX1E820MCL1
25 (1E)		120	8×12	0.12	600	27	2300	890	PLX1E121MDL1
()		180	10 × 13	0.12	900	25	2800	1080	PLX1E181MDL1
	40.2	39	8 × 9	0.12	273	33	1800	720	PLX1V390MCL1
35 (1V)		56	8×12	0.12	392	31	2100	830	PLX1V560MDL1
()		100	10 × 13	0.12	700	28	2700	1040	PLX1V101MDL1
	57.5	22	8×9	0.12	220	35	1800	700	PLX1H220MCL1
50 (1H)		27	8×12	0.12	270	33	2000	810	PLX1H270MDL1
()		47	10 × 13	0.12	470	29	2600	1020	PLX1H470MDL1

(\*3) Ambient temperature of a capacitor

Rated ripple current (mArms) at 105°C 100kHz

• Please refer to page 20, 21, 22 about the formed or taped product spec.

• Please refer to page 3 for the minimum order quantity.