# CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

**PLS** 

Radial Lead Type, Long Life Assurance



- •Ultra-low ESR, High ripple current.
- ●Load life of 5000 hours at 105°C.
- Radial lead type :

Lead free flow soldering condition correspondence.

• Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



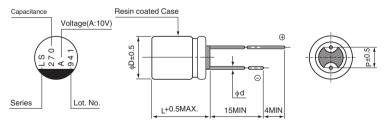


### ■Specifications

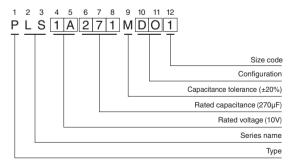
Item	Performance Characteristics								
Category Temperature Range	-55 to +105°C								
Rated Voltage Range	2.5 to 16V								
Rated Capacitance Range	100 to 1500uF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Tangent of loss angle (tan $\delta$ )	Less than or equal to the specified value 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' appl	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C							
Temperature Characteristics (Max.Impedance Ratio)	$Z+105^{\circ}C / Z+20^{\circ}C \le 1.25$ (100kHz) $Z-55^{\circ}C / Z+20^{\circ}C \le 1.25$								
		Capacitance change	Within ± 20% of the initial capacitance value (** 3)						
F. J	The specifications listed at right shall be met when the	tan δ	150% or less than the initial specified value						
Endurance	capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.	ESR (%1)	150% or less than the initial specified value						
	applied for 3000 flours at 100 O.	Leakage current (   2	Less than or equal to the initial specified value						
	The specifications listed at right shall be met when the	Capacitance change	Within ± 20% of the initial capacitance value (*3)						
Damp Heat	capacitors are restored to 20°C after the rated voltage is	tan δ	150% or less than the initial specified value						
(Steady State)	applied for 1000 hours at 60°C, 90% RH.	ESR (* 1)	150% or less than the initial specified value						
	,	Leakage current (% 2)	Less than or equal to the initial specified value						
	After soldering the capacitor under the soldering conditions	Capacitance change	Within ± 10% of the initial capacitance value (*3)						
D. Mariana I.	prescribed here as preheat at 150 to 200°C for 60 to 180 seconds	tan δ	130% or less than the initial specified value						
Resistance to	and peak temperature at 265°C for 10 seconds or less, the	ESR (%1)	130% or less than the initial specified value						
Soldering Heat	capacitor shall meet the specifications listed at right, provided that its temperature profile is measured at both of terminal ends facing	Leakage current ( * 2)	Less than or equal to the initial specified value						
	the soldering side.								
Marking	Navy blue print on the case top								

- $\mbox{\% 1}$  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.
- $\ensuremath{\,\%\,} 3$  Initial value : The value before test of examination of resistance to soldering.

## Dimensions



# Type numbering system (Example : $10V\ 270\mu F$ )



## (mm)

Size	φ6.3 × 9L	φ6.3 × 10.5L	φ8 × 7L	φ8 × 9L	φ8 × 12L	φ10 × 13L
φD	6.3	6.3	8.0	8.0	8.0	10.0
L	8.5	10.0	6.5	8.5	11.5	12.5
Р	2.5	2.5	3.5	3.5	3.5	5.0
φd	0.6	0.5	0.6	0.6	0.6	0.6

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

#### Voltage

٧	2.5	4	6.3	10	16
Code	е	g	j	Α	С

## • Frequency coefficient of rated ripple current

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



# ■Dimensions

Rated Voltage (V) code	Surge Voltage (V)	Rated Capacitance (µF)	Case Size φD × L (mm)	tan δ	Leakage Current (µA) (at 20°C after 2 minutes	ESR (mΩ) (20°C/100kHz)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
	2.8	330	○ 6.3×9	0.08	500	8	4800	PLS0E331MCO8
		680	△ 8×7	0.08	340	15	3900	PLS0E681MCL2
2.5		820	O 6.3 × 9	0.08	500	8	4800	PLS0E821MCO8
(0E)	2.0	820	▲ 8×9	0.08	410	7	5200	PLS0E821MCO6
		820	8 × 12	0.08	410	7	5800	PLS0E821MDO1
		1500	10 × 13	0.08	750	8	5500	PLS0E152MDO1
	4.6	270	O 6.3 × 9	0.08	500	8	4800	PLS0G271MCO8
		560	△ 8×7	0.08	448	15	3900	PLS0G561MCL2
(0G)		560	▲ 8×9	0.08	448	7	5200	PLS0G561MCO6
(00)		680	8 × 12	0.08	544	7	5800	PLS0G681MDO1
		1200	10 × 13	0.08	960	8	5500	PLS0G122MDO1
	7.2	330	■ 6.3 × 10.5	0.08	416	20	3000	PLS0J331MDL4
		390	△ 8×7	0.08	491	15	3900	PLS0J391MCL2
6.3		470	8 × 12	0.08	592	7	5500	PLS0J471MDO1
(OJ)		560	○ 6.3×9	0.08	706	9	4300	PLS0J561MCO8
		560	▲ 8×9	0.08	706	8	5000	PLS0J561MCO6
		820	10 × 13	0.08	1033	8	5500	PLS0J821MDO1
	11.5	150	■ 6.3 × 10.5	0.08	300	20	3000	PLS1A151MDL4
10 (1A)		270	8 × 12	0.08	540	8	4900	PLS1A271MDO1
(17)		470	10 × 13	0.08	940	8	5500	PLS1A471MDO1
	18.4	100	■ 6.3 × 10.5	0.08	320	24	2800	PLS1C101MDL4
16		270	8 × 12	0.08	864	9	4500	PLS1C271MDO1
(1C)		330	10 × 13	0.08	1056	9	4700	PLS1C331MDO1
		470	10 × 13	0.08	1504	9	4700	PLS1C471MDO1

<sup>•</sup> For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

No marked, 1 will be put at 12th digit of type numbering system.

△: In this case, 2 will be put at 12th digit of type numbering system.

■: In this case, 4 will be put at 12th digit of type numbering system.

A: In this case, 6 will be put at 12th digit of type numbering system.

 $\circ$ : In this case,  $\boxed{8}$  will be put at 12th digit of type numbering system.

# **Mouser Electronics**

**Authorized Distributor** 

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# Nichicon:

PLS1C101MDL4TD PLS1A471MDO1TD PLS1A271MDO1TD PLS0J561MCO6TD PLS0J471MDO1TD
PLS0J331MDL4TD PLS0G561MCL2TD PLS0E821MDO1TD PLS0E821MCO6TD PLS1C331MDO1TD
PLS0E821MCO8TD PLS0G122MDO1TD PLS1C471MDO1TD PLS0G681MDO1TD PLS0E331MCO8TD
PLS0E152MDO1TD PLS1C271MDO1TD PLS0E681MCL2TD PLS0G561MCO6TD PLS0J561MCO8TD
PLS0J821MDO1TD PLS0G271MCO8TD PLS1A151MDL4TD PLS0J391MCL2TD PLS0J391MCL2 PLS0G561MCO6
PLS0G561MCL2 PLS1C271MDO1 PLS0E821MDO1 PLS0G122MDO1 PLS0E821MCO6 PLS1C331MDO1
PLS1A471MDO1 PLS1C471MDO1 PLS0G681MDO1 PLS0G271MCO8 PLS0J331MDL4 PLS0J561MCO6
PLS1C101MDL4 PLS1A151MDL4 PLS0E331MCO8 PLS0E821MCO8 PLS0J821MDO1 PLS0J471MDO1
PLS0E152MDO1 PLS0E681MCL2 PLS1A271MDO1 PLS0J561MCO8