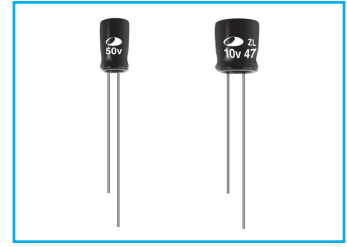


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**ZL** High Ripple Current, Height 7mmL Series

**M** Miniaturized **S** Solvent Proof **IZI** Low Impedance



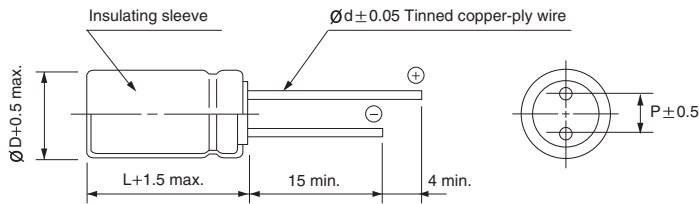
- Super miniature series with 7mmL height
- Load life of 3000 hours at 105°C
- Complied to the RoHS directive

**ZS** → **ZL**  
High Ripple

Item	Characteristics						
Operating temperature range	-40 ~ +105°C						
Leakage current	I = 0.01CV or 3μA whichever is greater (after 2 minutes) I = 0.03CV or 4μA whichever is greater (after 1 minute)						
Capacitance tolerance	±20% at 120Hz, 20°C						
Dissipation factor max. (at 120Hz, 20°C)	WV	6.3	10	16	25	35	50
	tanδ	0.22	0.19	0.16	0.14	0.12	0.10
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	2	2	2	2	2	2
	Z-40°C / Z+20°C	6	4	3	3	3	3
Load life	After an application of DC bias voltage plus the rated AC ripple current for 3000 hours at 105°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.						
	Leakage current	Less than specified value					
	Capacitance change	Within ±25% of the initial value					
	tanδ	Less than 200% of the specified value					
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4						

## DRAWING

Unit : mm



ØD	5	6.3	8
P	2.0	2.5	3.5
Ød	0.5	0.5	0.5

## DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

Item	6.3		10		16		25		35		50	
	ØD×L (mm)	Imp.(Ω) max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Imp.(Ω) max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Imp.(Ω) max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Imp.(Ω) max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
2.2												
10												
22												
33	5×7	0.84	165	5×7	0.84	165	5×7	0.84	165	5×7	0.84	165
47	5×7	0.84	165	5×7	0.84	165	5×7	0.84	165	6.3×7	0.42	235
68	6.3×7	0.42	235	6.3×7	0.42	235	6.3×7	0.42	235	6.3×7	0.42	235
100	6.3×7	0.42	235	6.3×7	0.42	235	6.3×7	0.42	235	8×7	0.20	350
150	6.3×7	0.42	235	6.3×7	0.42	235	8×7	0.20	350			
220	8×7	0.20	350	8×7	0.20	350						
330	8×7	0.20	350									

## FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT (See page 119)