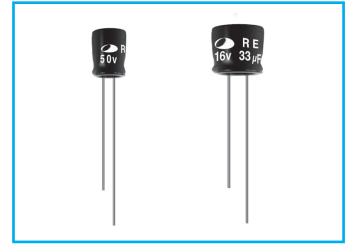
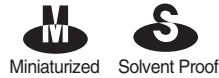


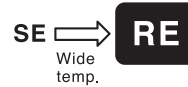
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



RE Wide Temperature Range, Height 5mmL Series



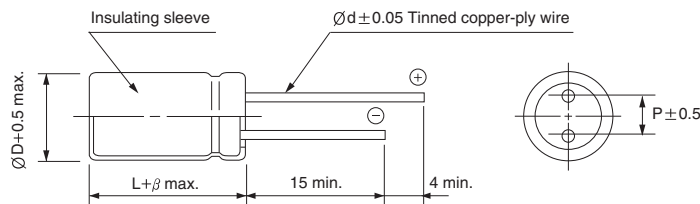
- Ultra miniature series with 5mmL height
- Wide operating temperature range of -55 ~ +105°C
- Suitable to replace tantalum capacitors at low cost
- Complied to the RoHS directive



Item	Characteristics							
Operating temperature range	-55 ~ +105°C							
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)							
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C							
Dissipation factor max. (at 120Hz, 20°C)	WV	4	6.3	10	16	25	35	50
	$\tan\delta$	0.35	0.27	0.23	0.19	0.15	0.13	0.11
Low temperature characteristics (Impedance ratio at 120Hz)	WV	4	6.3	10	16	25-50		
	Z-25°C/Z+20°C	7	3	3	2	2		
	Z-40°C/Z+20°C	12	8	5	4	3		
Load life (after application of the rated voltage for 1000 hours at 105°C)	Leakage current	Less than specified value						
	Capacitance change	Within $\pm 25\%$ of initial value						
	$\tan\delta$	Less than 200% of specified value						
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ 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	4	5	6.3	8
P	1.5	2.0	2.5	2.5
Ød	0.45	0.45	0.45	0.45
β	1.0	1.5		

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

µF \ WV	4		6.3		10		16		25		35		50	
1.0													4×5	7.7
1.5													4×5	9.4
2.2													4×5	11
3.3													4×5	14
4.7									4×5	14	4×5	15	5×5	19
6.8									4×5	17	5×5	21	5×5	23
10			4×5	15	4×5	17	4×5	18	5×5	24	5×5	26	6.3×5	33
15	4×5	17	4×5	19	4×5	21	5×5	26	5×5	29	6.3×5	37	6.3×5	40
22	4×5	20	4×5	23	5×5	29	5×5	32	6.3×5	42	6.3×5	45	8×5	58
33	4×5	25	5×5	32	5×5	35	6.3×5	45	6.3×5	51	8×5	65	8×5	71
47	4×5	29	5×5	39	6.3×5	49	6.3×5	54	8×5	72	8×5	77		
68	5×5	41	6.3×5	55	6.3×5	59	8×5	77	8×5	87				
100	5×5	50	6.3×5	66	8×5	85	8×5	93						
150	6.3×5	71	8×5	96	8×5	104								
220	8×5	102	8×5	116										

↑ ↑
Ripple current (mA rms) at 105°C, 120Hz
Case size ØD×L (mm)

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

µF \ Frequency	60Hz	120Hz	1kHz	10kHz	50kHz	100kHz ≤
~ 47	0.75	1.00	1.55	2.00	2.00	2.00
68 ~	0.80	1.00	1.35	1.50	1.62	1.75

MINIATURE TYPES