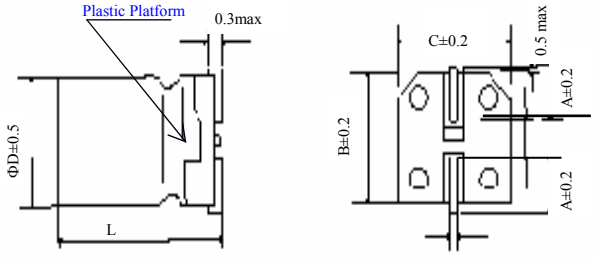
- Low impedance with temperature range –55ºC ~ +105ºC and load life of 1000~2000 hrs
- Lead free soldering product is available subject to customers request

SPECIFICATIONS

Item	Characteristics
Operating Temperature Range (°C)	-55~+105 ºC
Leakage Current (μ A)	After 2 minutes application of rated voltage, leakage current is not more than 0.002 CV or 0.5 μ A, whichever is greater.
Capacitance Tolerance (20°C,120 Hz)	±20% at 120 Hz, 20ºC
Surge Voltage & Max Tan δ 120Hz, Temperature 20ºC	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 Tan δ: 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.12
Low Temperature Stability	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 Impedance Ratio ZT/Z20(max): Z-25ºC/Z+20ºC: 2 / 2 / 2 / 2 / 2 / 2 Z-40ºC/Z+20ºC: 5 / 4 / 4 / 3 / 3 / 3
Load Life (85°C)	Capacitance Change: Within ±20% of initial value Tan δ: Initial specified value or less Leakage Current: Initial specified value or less
Applicable Standards	JIS C-5141 and JIS C-5102
Resistance to soldering heat	After re-flow soldering according to re-flow soldering condition and restored at room temperature, the meet the characteristics requirements listed at right Capacitance Change: Within ±10% of initial value Tan δ: High specified value or less Leakage Current: Initial specified value or less

DIMENSIONS



Lead spacing and diameter (mm)

ϕDxL	4x5.4	5x5.4	6.3x5.4	8x10.5	10x10.5
A	1.8	2.1	2.4	2.4	3.2
B	4.3	5.3	6.6	6.6	10.3
C	4.3	5.3	6.6	6.6	10.3
E	1.0	1.3	2.2	2.2	4.5
L	5.4	5.4	5.4	7.7	10.5

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz
Coefficient	0.35	0.50	0.64	0.83	1.00

■ Standard Ripple Current

WV / CAP (μF)		6.3			10			16		
10	10R							4x5.4	3.0	60
15	15R							5x5.4 4x5.4	1.8 (3.0)	95 (60)
22	22R	4x5.4	3.0	60	5x5.4 4x5.4	1.8 (3.0)	95 (60)	5x5.4 4x5.4	1.8 (3.0)	95 (60)
33	33R	5x5.4 4x5.4	1.8 (3.0)	95 (60)	5x5.4 4x5.4	1.8 (3.0)	95 (60)	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)
47	47R	5x5.4 4x5.4	1.8 (3.0)	95 (60)	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)
68	68R	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x5.4	1.0	140	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)
100	101	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)
150	151	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7	0.6	230
220	221	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7	0.6	230	8x10.5 6.3x7.7	0.30 (0.6)	450 (230)
330	331	6.3x7.7	0.6	230	8x10.5	0.30	450	10x10.5 8x10.5	0.15 (0.30)	670 (450)
470	471	8x10.5	0.30	450	8x10.5	0.30	450	10x10.5 8x10.5	0.15 (0.30)	670 (450)
680	681	8x10.5	0.30	450	10x10.5	0.15	670	10x10.5	0.15	670
1000	102	10x10.5 8x10.5	0.15 (0.30)	670 (450)	10x10.5	0.15	670	10x10.5	0.15	670
1500	152	10x10.5	0.15	670						

■ Standard Ripple Current

WV / CAP (μF)		25			35			50		
1	1R0				4x5.4	3.0	60	4x5.4	5.0	30
1.5	1R5				4x5.4	3.0	60	4x5.4	5.0	30
2.2	2R2				4x5.4	3.0	60	4x5.4	5.0	30
3.3	3R3				4x5.4	3.0	60	4x5.4	5.0	30
4.7	4R7	4x5.4	3.0	60	4x5.4	3.0	60	5x5.4	3.0	50
6.8	6R8	4x5.4	3.0	60	5x5.4	1.8	95	6.3x5.4	2.0	70
10	10R	5x5.4 4x5.4	1.8 (3.0)	95 (60)	5x5.4 4x5.4	1.8 (3.0)	95 (60)	6.3x5.4	2.0	70
15	15R	5x5.4	1.8	95	5x5.4	1.8	95	6.3x5.4	2.0	70
22	22R	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x7.7 6.3x5.4	1.0 (2.0)	120 (70)
33	33R	6.3x5.4 5x5.4	1.0 (1.8)	140 (95)	6.3x5.4	1.0	140	6.3x7.7	1.0	120
47	47R	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7 6.3x5.4	0.6 (1.0)	230 (140)	6.3x7.7	1.0	120
68	68R	6.3x7.7	0.6	230	6.3x7.7	0.6	230	8x10.5	0.60	300
100	101	6.3x7.7	0.6	230	8x10.5	0.30	450	8x10.5	0.60	300
150	151	8x10.5 6.3x7.7	0.30 (0.6)	450 (230)	8x10.5	030	450	10x10.5	0.30	500
220	221	8x10.5	0.30	450	10x10.5 8x10.5	0.15 (0.30)	670 (450)	10x105	0.30	500
330	331	10x10.5 8x10.5	0.15 (0.30)	670 (450)	10x10.5	0.15	670	CASE SIZE	IMPEDANCE	Allowable Ripple
470	471	10x10.5	0.15	670	10x10.5	0.15	670			