FEATURES

- Load life of 3,000 hours at +105˚C.
- Designed for surface mounting on high-density circuit board.
- Emboss carrier tape packing system is available for automatic insertion.

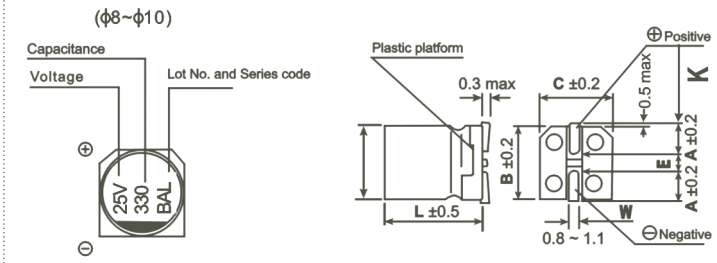
SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature Range	-40 to +105˚C
Rated Working Voltage Range	6.3 to 50V
Nominal Capacitance Range	33 to 1000μF
Capacitance Tolerance	±20% at 120Hz, +20˚C
Leakage Current	I ≤0.01CV or 3 (μA) whichever is greater measured after 2 minutes application of rated working voltage at +20˚C
tan δ (120Hz, +20˚C)	The values shown in the STANDARD RATINGS tables
Low Temperature Characteristics	Measurement frequency: 120Hz

Working Voltage (V)	6.3	10	16	25	35	50	63	100
Z-25˚C / Z+20˚C	4	3	2	2	2	2	3	3
Z-40˚C / Z+20˚C	8	6	4	4	3	3	4	4

Load Life	After applying rated voltage for 3,000 hours at +105˚C ±2˚C and then being stabilized at +20˚C, capacitors shall meet the following limits Cap. change : ±30% of the initial measured value tan δ : ≤300% of the initial specified value DC leakage current : ≤initial specified value
Shelf Life	After 1,000 hours at +105˚C ±2˚C with no voltage applied and then being stabilized at +20˚C, they meet the specified value life characteristics listed above
Resistance to Soldering Heat	After reflow soldering and then being stabilized at +20˚C, the capacitors shall meet the following limits Cap. change : ±10% of the initial measured value tan δ : ≤initial specified value DC leakage current : ≤initial specified value
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)

CHIP TYPE



PART NUMBER SYSTEM (EXAMPLE : 10V 220μF)

1 2 3	4 5 6	7	8 9	10	11 12	13 14
VRL	227	M	1A	F	T2	TR

- Type (Taping Code)
- Case Length (10.2mm)
- Diameter (8mm)
- Voltage (10V)
- Tolerance (+20%)
- Capacitance (220μF)
- Series

SAMXON®
Aluminum Electrolytic Capacitors

Surface Mount Type (貼片品), Long Life Assurance (超長壽命)

STANDARD RATINGS

D	L	B, C	A	W	E	K
8.0	10.2	8.3	2.95	0.90 ± 0.2	3.1	0.70-0.40 to +0.20
10.0	10.2	10.3	3.2	0.90 ± 0.2	4.6	0.70-0.40 to +0.20

Unit: mm

Voltage (Code)		6.3V (0J)			10V (1A)			16V (1C)		
Cap. (μF)	Code	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current
220	227				8 x 10.2	0.24	141	10 x 10.2	0.20	216
330	337	8 x 10.2	0.28	290	10 x 10.2	0.24	290	10 x 10.2	0.20	290
470	477	10 x 10.2	0.28	320	10 x 10.2	0.24	320	10 x 10.2	0.20	320
1000	108	10 x 10.2	0.28	410						

Maximum Allowable Ripple Current (mArms) at 105˚C 120Hz
Case Size ΦD x L (mm)
tan δ at 20˚C 120Hz

Voltage (Code)		25V (1E)			35V (1V)			50V (1H)		
Cap. (μF)	Code	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current	Case Size	tan δ	Ripple Current
33	336							8 x 10.2	0.12	140
47	476				8 x 10.2	0.13	92	8 x 10.2	0.12	170
100	107	8 x 10.2	0.16	116	10 x 10.2	0.13	151	10 x 10.2	0.12	310
220	227	10 x 10.2	0.16	320	10 x 10.2	0.13	375			
330	337	10 x 10.2	0.16	450						

Maximum Allowable Ripple Current (mArms) at 105˚C 120Hz
Case Size ΦD x L (mm)
tan δ at 20˚C 120Hz

* Other voltage, capacitance, dimension are also available upon request.