

Chip Type Standard Capacitors

- Compatible with surface mounting for 5.3mm high capacitors.
- Supplied with μ A taping.
- Guarantees 2000 hours at 85°C.



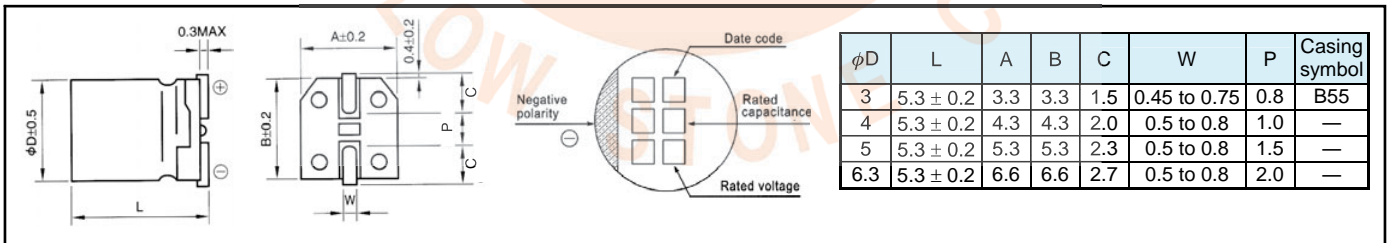
Marking color : Black print

SPECIFICATIONS

Item	Performance								
Category Temperature Range	-40°C~+85°C								
Capacitance Tolerance	±20% (20°C, 120Hz)								
Leakage Current (μ A)	Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μ F) ; V : Rated voltage (V) (20°C)								
Dissipation Factor (Tan δ at 120Hz, 20°C)	Rated voltage (V)		4	6.3	10	16	25	35	50
	tan δ (max.)	ϕ 3	0.42	0.30	0.24	0.22	0.16	0.14	0.12
ϕ 4 to ϕ 6.3		0.42	0.28	0.24	0.20	0.14	0.12	0.10	
Low Temperature Characteristics (at 120Hz)	Rated voltage (V)		4	6.3	10	16	25	35	50
	Impedance ratio (max.)	ϕ 3	Z-25°C/Z+20°C	7	4	3	2	2	2
			Z-40°C/Z+20°C	17	10	8	6	4	3
	ϕ 4 to ϕ 6.3	Z-25°C/Z+20°C	7	3	3	2	2	2	2
Z-40°C/Z+20°C		15	8	5	4	3	3	3	
Endurance (85°C) (Applied ripple current)	Test time		2000 hours (ϕ 3 : 1000 hours)						
	Capacitance Change		Within ±20% of initial value (4WV : ±30%)						
	Dissipation Factor		200% or less of the initial specified value (4WV : 300%)						
	Leakage Current		The initial specified value or less						
Shelf life (85°C)	Test time : 1000 hours; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1								
Coefficient of Frequency for Rated Ripple Current	Rated voltage (V)		Frequency (Hz)		50 - 60	120	1k	10k · 100k	
	4 to 16	25 to 35	50	60	0.80	1	1.15	1.25	
					0.80	1	1.25	1.40	
					0.80	1	1.35	1.50	
Applicable standards JIS C5101-1 1998, -18 1999 (IEC 60384-1 1992, -18 1993)									

OUTLINE DRAWING

Unit : mm



STANDARD RATINGS

Rated voltage (V)	4			6.3			10			16			25			35			50			
	Item	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
		ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms	ϕ D×L (mm)	Ω	mArms
0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	905	2
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	754	5
0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	603	3
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	503	6
0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	424	4
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	353	7
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	199	6
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	166	10
2.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	106	8	4×5.3	75	15
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	70	9	4×5.3	50	19
4.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3×5.3	57	11	4×5.3	42	20
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	49	19	5×5.3	35	26
10	—	—	—	—	—	—	4×5.3	40	23	3×5.3	37	18	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	4×5.3	33	26	5×5.3	23	32	5×5.3	20	34	6.3×5.3	17	44	
22	3×5.3	32	14	4×5.3	21	31	5×5.3	18	39	5×5.3	15	44	6.3×5.3	11	55	6.3×5.3	9.1	59	—	—	—	—
33	4×5.3	21	31	5×5.3	14	44	5×5.3	12	48	6.3×5.3	10	63	6.3×5.3	7.0	67	—	—	—	—	—	—	—
47	4×5.3	15	37	5×5.3	10	52	6.3×5.3	8.5	67	6.3×5.3	7.1	75	6.3×5.3	6.4	75	—	—	—	—	—	—	—
100	5×5.3	7.0	63	6.3×5.3	5.0	89	6.3×5.3	4.0	98	6.3×5.3	3.3	103	—	—	—	—	—	—	—	—	—	—
220	6.3×5.3	3.2	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 85°C, 120Hz ; ESR : 20°C, 120Hz

NOTE

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.