

FEATURES

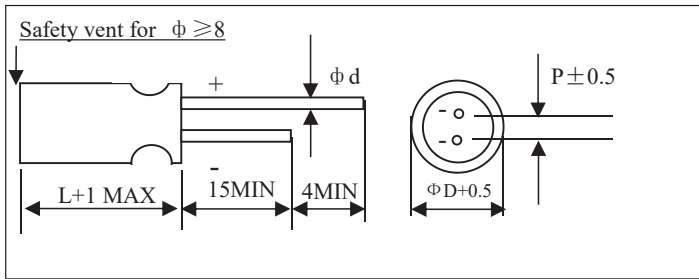
1、Low impedance, with 7mm height, wide operating temperature range.

SPECIFICATIONS

Item	Performance Characteristics																																				
Operating Temperature Range	-40 to +105℃																																				
Rated Working voltage Range	6.3 to 50V																																				
Nominal Capacitance Range	6.8to470(uF)																																				
Capacitance Tolerance	±20%（120Hz， +20℃）																																				
Leakage Current	I≤0.01CV or 3(uA) Whichever is greater measured after 2 minutes application of rated working voltage at +20℃																																				
Dissipation Factor tan δ (120Hz+20℃)	<table><tr><td>Working voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>tan δ (max.)</td><td>0.18</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.8</td></tr></table>							Working voltage(V)	6.3	10	16	25	35	50	tan δ (max.)	0.18	0.16	0.14	0.12	0.10	0.8																
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Low Temperature Characteristics	Impedance ratio max. at 120Hz <table><tr><td>Working voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Z-25℃/Z+20℃</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z-40℃/Z+20℃</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table>							Working voltage(V)	6.3	10	16	25	35	50	Z-25℃/Z+20℃	2	2	2	2	2	2	Z-40℃/Z+20℃	3	3	3	3	3	3									
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Multiplier for Ripple Current vs. Frequency	<table><tr><td colspan="2">CAP(uF)\Hz</td><td>60(50)</td><td>120</td><td>400</td><td>1K</td><td>10K</td><td>50K-100K</td></tr><tr><td rowspan="3">Multiplier</td><td>CAP≤10</td><td>0.47</td><td>0.59</td><td>0.76</td><td>0.85</td><td>0.97</td><td>1</td></tr><tr><td>10<CAP≤100</td><td>0.52</td><td>0.65</td><td>0.80</td><td>0.89</td><td>0.97</td><td>1</td></tr><tr><td>100<CAP≤1000</td><td>0.58</td><td>0.72</td><td>0.84</td><td>0.90</td><td>0.98</td><td>1</td></tr></table>							CAP(uF)\Hz		60(50)	120	400	1K	10K	50K-100K	Multiplier	CAP≤10	0.47	0.59	0.76	0.85	0.97	1	10<CAP≤100	0.52	0.65	0.80	0.89	0.97	1	100<CAP≤1000	0.58	0.72	0.84	0.90	0.98	1
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Multiplier for Ripple Current vs. Temperature	<table><tr><td>Temperature℃</td><td>60</td><td>70</td><td>85</td><td>105</td></tr><tr><td>Multiplier</td><td>1.8</td><td>1.5</td><td>1.3</td><td>1.0</td></tr></table>							Temperature℃	60	70	85	105	Multiplier	1.8	1.5	1.3	1.0																				
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High temperature Loading	Test conditions Duration : 2000 hours Ambient temperature :+105℃ Applied voltage : Rated DC working voltage Post test requirements at +20℃ Leakage current : ≤ Initial specified value Capacitance change : ≤ ±20% of initial measured value tan δ : ≤200% of initial specified value																																				
Shelf life	Test conditions Duration : 1000 hours Ambient temperature :+105℃ Applied voltage : (None) Post test requirements at +20℃ Leakage current : ≤Initial specified value Capacitance change : ≤ ±20% of initial measured value tan δ : ≤200% of initial specified value																																				
Others	JIS C-5141 JIS C-5102																																				

CASE SIZE TABLE

Unit:mm



D ϕ	4	5	6.3	8
P	1.5	2.0	2.5	3.5
d ϕ (± 0.05)	0.45			0.5

DIMENSIONS

		$\phi D \times L$ (mm)								
Cap.(uF)	WV(SV)	6.3V(8)			10V(13)			16V(20)		
	Code	0J			1A			1C		
15	156							4×7	3.3	70
22	226				4×7	3.3	70	5×7	1.7	110
33	336	5×7	1.7	110	5×7	1.7	110	6.3×7	0.8	160
47	476	5×7	1.7	116	5×7	0.8	160	6.3×7	0.8	168
68	686	5×7	0.8	150	5×7	0.8	168	8×7	0.5	200
100	107	5×7	0.8	175	6.3×7	0.5	190	8×7(9)	0.5	210(223)
150	157	6.3×7	0.5	190	8×7(9)	0.5	210(224)	8×7(9)	0.4	230(240)
220	227	6.3×7	0.5	205	8×7(9)	0.4	230(235)	8×7(9)	0.3	250(258)
330	337				8×7(9)	0.3	250(250)	8×7(9)	0.25	262(270)
470	477							8×9	0.2	275
								Case Size	Impedance	Allowable ripple

Case Size D×L(mm)

Max.Impedance (Ω) at 20℃ 100kHz

Allowable Ripple (mA rms) at 105℃ 100KHz

$\phi D \times L$ (mm)

		25V(32)			35V(44)		
Cap.(uF)	WV(SV)	1E			1V		
	Code						
6.8	685				4×7	3.3	70
10	106	4×7	3.3	70	5×7	1.7	110
15	156	5×7	1.7	110	6.3×7	0.8	160
22	226	5×7	1.7	118	6.3×7	0.8	168
33	336	6.3×7	0.8	160	8×7	0.5	200
47	476	8×7	0.5	180	8×7	0.5	235
68	686	8×7	0.5	200	8×7	0.4	252
100	107	8×7	0.4	240	8×7	0.3	278
150	157	8×7	0.3	270	8×7	0.25	320
220	227	8×7	0.25	290	Case Size	Impedance	Allowable ripple

Case Size D×L(mm)

Max.Impedance (Ω) at 20℃ 100kHz

Allowable Ripple (mA rms) at 105℃ 100KHz