

FEATURESS

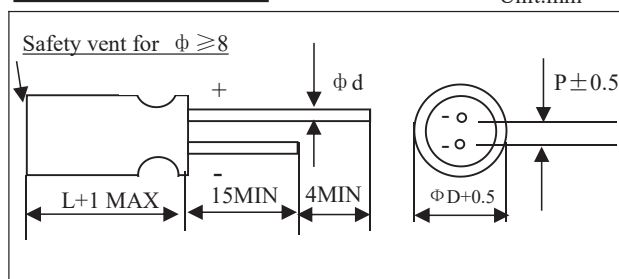
- 1、Roted Working Voltage Range 6.3 to 50VDC Operation Temperature Range -40 to +105°C
- 2、This series is for communication equipments ,switching power supply ,industrial measuring instruments, automotive electric products ,etc.

SPECIFICATIONS

Item	Performance Characteristics																																				
Operating Temperature Range	-40 to +105℃																																				
Rated Working voltage Range	6.3 to 50V																																				
Nominal Capacitance Range	0.1 to 560(uF)																																				
Capacitance Tolerance	±20%（120Hz， +20℃）																																				
Leakage Current	I≤0.01CV or 3(uA) 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>0.24</td><td>0.21</td><td>0.18</td><td>0.15</td><td>0.12</td><td>0.10</td></tr></table>							Working voltage(V)	6.3	10	16	25	35	50	tan δ (max.)	0.24	0.21	0.18	0.15	0.12	0.10																
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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>4</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>8</td><td>5</td><td>4</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℃	4	2	2	2	2	2	Z-40℃/Z+20℃	8	5	4	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>0.8</td><td>1</td><td>1.30</td><td>1.45</td><td>1.65</td><td>1.70</td></tr><tr><td>10<CAP≤100</td><td>0.8</td><td>1</td><td>1.23</td><td>1.36</td><td>1.48</td><td>1.53</td></tr><tr><td>100<CAP≤1000</td><td>0.8</td><td>1</td><td>1.16</td><td>1.25</td><td>1.35</td><td>1.38</td></tr></table>							CAP(uF)\Hz		60(50)	120	400	1K	10K	50K-100K	Multiplier	CAP≤10	0.8	1	1.30	1.45	1.65	1.70	10<CAP≤100	0.8	1	1.23	1.36	1.48	1.53	100<CAP≤1000	0.8	1	1.16	1.25	1.35	1.38
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Multiplier for Ripple Current vs. Temperature	<table><tr><td>Temperature℃</td><td>45</td><td>60</td><td>70</td><td>85</td><td>105</td></tr><tr><td>Multiplier</td><td>2.10</td><td>1.90</td><td>1.65</td><td>1.4</td><td>1.00</td></tr></table>							Temperature℃	45	60	70	85	105	Multiplier	2.10	1.90	1.65	1.4	1.00																		
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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℃ Same limits for high temperature loading																																				
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	0.45	0.45	0.5

DIMENSIONS

 $\Phi D \times L$ (mm)

Cap.(uF)	WV(SV) Code	6.3V(8)		10V(13)		16V(20)	
		0J		1A		1C	
10	106					4×7	29
22	226	4×7	34	4×7	38	4×7	44
33	336	4×7	42	4×7	47	5×7	57
47	476	4×7	50	4×7	59	5×7	62
100	107	5×7	75	5×7	70	(5)6.3×7	(75)100
220	227	6.3×7(9)	125(135)	6.3×7(9)	135(147)	(6.3)8×7	(140)150
330	337	8×7(9)	145(148)	8×7(9)	152(162)	8×7(9)	160(172)
470	477	8×7(9)	158(162)	8×7(9)	165(172)	8×7(9)	175(185)
560	567	8×9	172			Case Size	Allowable ripple

Allowable Ripple (mA rms)at105℃120Hz

 $\Phi D \times L$ (mm)

Cap.(uF)	WV(SV) Code	25V(32)		35V(44)		50V(63)	
		1E		1V		1H	
0.1	104					4×7	1.0
0.22	224					4×7	2.3
0.33	334					4×7	3.5
0.47	474					4×7	5.0
1	105					4×7	10
2.2	225					4×7	19
3.3	335					4×7	24
4.7	475			4×7	24	4×7	29
10	106	4×7	30	5×7	36	(5)6.3×7	(41)44
22	226	5×7	48	6.3×7	57	6.3×7	60
33	336	(5)6.3×7	(60)63	6.3×7	70	8×7	73
47	476	(5)6.3×7	(66)72	6.3×7	80	8×7	85
100	107	6.3×7	80	8×7	90		
220	227	8×7	92			Case Size	Allowable ripple

Allowable Ripple (mA rms)at105℃120Hz