寬温度長壽命品 CDUL Series
Wide temperature Long life Product CDUL Series

Aillen®
EXPERT IN PASSIVE PARTS

產品特點 Features

◎產品直徑 Case diameter Φ 6.3mm~Φ 10mm
◎適用于再回流焊 Reflow soldering is available
◎適用于高密度表面組裝 Available for high densify surface mounting
◎壽命105℃ 3000~5000小時標準品 Life time105℃ 3000 hrs standard product
◎性能穩定,可靠性高 High stability and reliability

規格書 SPECIFICATION

項目 Items	特性 Characteristics
工作温度範圍 Category Temperature Ran	−55℃~+105℃
額定電壓範圍 Rated Working Voltage Range	6.3~100V.DC
標稱電容量範圍 Nominal Capacitance Range	4.7μF~1500μF
標稱電容量允許偏差 Nominal Capacitance Tolerance	±20%(120Hz+20℃)
泄漏電流範圍 Leakage Current(MAX)	I≤0.01CV(μA) or 3 (μA) after 2 minutes I=Leakage Current(μA) C=Nominal Capacitance(μF) V= Roted Voltage(V)
損耗角正切值 Dissipation Factor(MAX) Tan δ (20℃,120Hz2)	Rated Voltage(V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Tan δ: 0.30 / 0.24 / 0.20 / 0.18 / 0.16 / 0.14 / 0.14 / 0.14
耐久性 Load Life	+105℃施加額定工作電壓5000H後，（Φ6.3，3000H）放置16H,電容器應滿足以下要求。 After applying rated voltage with max ripple current for 5000hrs（Φ6.3，3000hrs）at 105℃,and then resumed 16 hours ,the capacitors shall meet the following requirements Capacitance Change: Within ± 30% of the initial value Dissipation Factor: Not more than 300% of the specified value Leakage Current: Not more than the specified value
高温貯存 Shelf Life	+105℃貯存1000H後，放置16H，電容器應滿足以下要求。 After storage for 1000hrs at 105℃, then resumed 16 hours, the capacitors shall meet the following requirements Capacitance Change: Within ±30% of the initial value Dissipation Factor: Not more than 300% of the specified value Leakage Current: Within 200% of initial specified value
耐焊接熱 Resistance to Soldering Heat	在250℃的條件下，電容器在熱板上保持30秒，然後從熱板上取出電容器，讓其在室温下恢復，電容器應滿足以下要求。 The capacitors shall be kept on then hot plate maintained at 250℃ for 30 seconds.After removing from the hot plate and restored at room temperature, they meet the following requirement: Capacitance Change: Within ± 10% of the initial value Dissipation Factor: Not more than the initial specified value Leakage Current: Not more than the initial specified value
低温特性及阻抗比 Low Temperature Stability Impedance Ratio(MAX) 120Hz	Roted Voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Z−25℃/Z+20℃: 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 Z−55℃/Z+20℃: 8 / 6 / 4 / 4 / 3 / 3 / 3 / 3
其它 Other	IEC 60384 JIS−C5101

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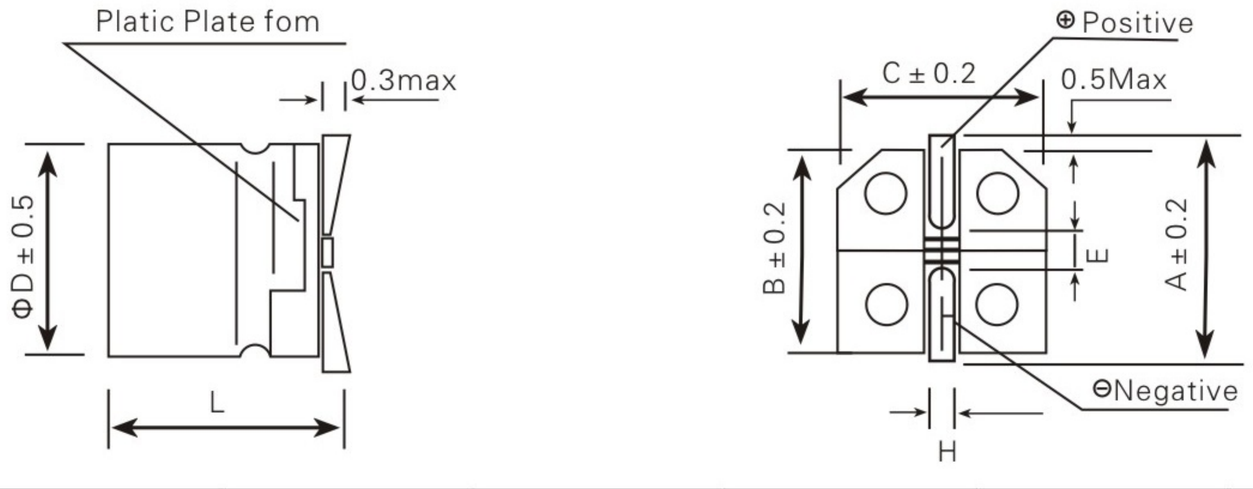
尺寸圖 Dimensions
(Φ6.3~Φ10)



單位：mm

ΦD	L	A	B	C	E	H
6.3	7.7 ± 0.3	7.2	6.6	6.6	2.1	0.5~0.9
8	10.2 ± 0.5	9.1	8.3	8.3	3.1	0.8~1.1
10	10.2 ± 0.5	11.1	10.3	10.3	4.5	0.8~1.1

一覽表 Standard

Voltage (Code)		6.3		10		16		25	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
100	107	6.3 × 7.7	105					6.3 × 7.7	91
220	227	6.3 × 7.7	105	6.3 × 7.7	105	6.3 × 7.7	105	8 × 10.2	175
						8 × 10.2	150		
330	337	6.3 × 7.7	105	8 × 10.2	196	8 × 10.2	195	10 × 10.2	240
		8 × 10.2	210					8 × 10.2	220
470	477	8 × 10.2	210	8 × 10.2	210	8 × 10.2	230	10 × 10.2	280
		10 × 10.2	300			10 × 10.2	295		
1000	108	8 × 10.2	230	10 × 10.2	315				
		10 × 10.2	300						
1500	158	10 × 10.2	315						

Maximum Allowable Ripple Current (mArms) at 105℃ 120Hz
在105℃ 120Hz條件的最大紋波值

Case Size Φ D x L (mm)
尺寸 Φ D x L (mm)

Voltage (Code)		35		50		63		100	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
4.7								6.3 × 7.7	35
10								6.3 × 7.7	35
								8 × 10.2	77
22				6.3 × 7.7	51	6.3 × 7.7	39	8 × 10.2	84
								10 × 10.2	126
33				6.3 × 7.7	60	6.3 × 7.7	49	8 × 10.2	133
						8 × 10.2	98		
47		6.3 × 7.7	70	6.3 × 7.7	63	8 × 10.2	112	10 × 10.2	140
				8 × 10.2	120				
100		6.3 × 7.7	100	8 × 10.2	63	8 × 10.2	160		
		8 × 10.2	120	10 × 10.2	170	10 × 10.2			
220		8 × 10.2	170	10 × 10.2	220	10 × 10.2	196		
		10 × 10.2	220						
330		10 × 10.2	245						

Maximum Allowable Ripple Current (mArms) at 105℃ 120Hz
在105℃ 120Hz條件的最大紋波值

Case Size Φ D x L (mm)
尺寸 Φ D x L (mm)

紋波電流補正系數 Multiplier For Ripple Current

頻率系數 Frequency cocfficient

頻率 Frequency	50Hz	120Hz	300Hz	1kHz	≥10kHz
系數 Coefficient	0.70	1.00	1.17	1.36	1.50