



CERAMIC DISC CAPACITORS CHARACTERISTICS

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特性 CHARACTERISTICS

項目 ITEM	規格 SPECIFICATION		檢測方法及條件 TEST METHOD AND CONDITION																								
1. 外觀、尺寸、標誌 Appearance, size and mark	無異常 Normal		依外觀、尺寸及標誌標準，尺寸用游標卡尺檢查、外觀、標誌用目視法檢驗； According to the standard of appearance, size and mark, size measured by vernier, appearance and marks test by visual.																								
2. 絕緣電阻 Insulation resistance	T.C.	10000MΩ MIN	端子間施加額定電壓，500VDC以上，以500VDC測定，測定時間為60秒以上。 Apply rated voltage. Above 500vdc rated voltage tested by 500vdc, Min.charged 60 seconds.																								
	HIK	5000MΩ MIN																									
	半導體(S.C.)	100MΩ MIN																									
3. 耐電壓 Voltage proof	無破裂等明顯損壞異狀 No failure		端子間加工作電壓施壓1-5秒，充放電電流為50mA以下。 電壓測試完後需存放於25°C的環境下，放置96hrs後方能測試其容量。 Applied as following T.V. 1-5s between terminal and less than 50mA current. Capacitor shall be measured capacitance after leaving for 96hrs at 25°C. W.V.<500VDC T.V=200% × W.V W.V. < 1KVDC T.V=150% × W.V W.V. < 2KVDC T.V=125% × W.V (FOR DUREZ) (EPOXY IN P9)																								
4. 靜電電容 Capacitance	在標準允許誤差內 Within the specified tolerance		使用頻率 (Test frequency): T.C.: < 1000PF 1MHz > 1000PF 1KHz HIK, 半導體類 (S.C.) 1KHz 使用電壓 (Test voltage): T.C. HIK. 1.0 ± 0.2Vrms S.C. 0.1Vrms 使用溫度 (Temperature): 25°C ± 2°C																								
5. Q 值和 散逸因素 Q AND DF	T.C.: ① C<30PF: Q ≥ 400+20xC ② C>30PF: Q ≥ 1000 HIK: ① Y5E, Y5P, Z5U, Y5U, X7R: DF ≤ 2.5% ② Z5V, Y5V: DF ≤ 5% ③ BN, Y5T: DF ≤ 0.5%, Y5R: DF ≤ 0.2% (Low Loss, Non RoHS) 半導體類(S.C.): ① Y5P, Y5U: DF ≤ 5% ② Y5V, DF: ≤ 7%		測定條件同靜電容量之規定。 same condition as the capacitance																								
	T.C.: C ≤ 4PF TC ± 250PPM/°C C ≤ 9.9PF TC ± 120PPM/°C C ≥ 10PF TC ± 60PPM/°C SL TC P350-N1000																										
	HIK, S.C.: Y5E: ± 4.7% Y5P, BN: ± 10% X7R, Y5R: ± 15% Y5T: ± 22% Y5U, Z5U: +22%-56% Y5V, Z5V: +22%-82%																										
6. 溫度特性 Temperature characteristic (T.C.)	試驗步驟見下表: Test temperature		<table border="1"> <thead> <tr> <th>Step</th> <th>Temp</th> <th>Temp</th> <th>Cap</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>25 ± 2°C</td> <td>T1</td> <td>C1</td> </tr> <tr> <td>2</td> <td>The low temp</td> <td>T2</td> <td>C2</td> </tr> <tr> <td>3</td> <td>25 ± 2°C</td> <td>T1</td> <td>C1</td> </tr> <tr> <td>4</td> <td>The high temp</td> <td>T2</td> <td>C2</td> </tr> <tr> <td>5</td> <td>25 ± 2°C</td> <td></td> <td></td> </tr> </tbody> </table> <p>溫度特性容量變化率的計算公式見下表 T.C. calculated by under formula</p> $\textcircled{1} \text{ T.C.:(PPM)} \quad \text{T.C.} = \frac{C_2 - C_1}{C_1(T_2 - T_1)} \times 10^6$ $\textcircled{2} \text{ HIK, S.C.} \quad \text{T.C.} = \frac{C_2 - C_1}{C_1} \times 100\%$	Step	Temp	Temp	Cap	1	25 ± 2°C	T1	C1	2	The low temp	T2	C2	3	25 ± 2°C	T1	C1	4	The high temp	T2	C2	5	25 ± 2°C		
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5	25 ± 2°C																										
7. 焊錫附著性及焊錫耐熱性 Resistance to solder heat and Solder ability of leads	外觀 Appearance	引線周圍至少75%的面積均勻附錫，且本體無破裂等損壞現象。 Lead wire shall be soldered with uniformly coated on the axial direction over 75% of the circumferential direction, and no defect.																									