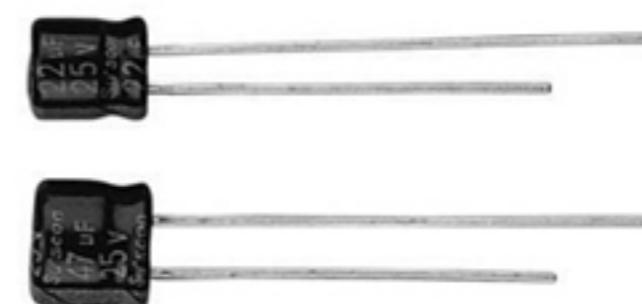


# H5 series

- Subminiature product, 105°C.
- Applicable to small electronic devices.
- Height : 5mm.
- RoHS Compliance
- 105°C超小型產品。
- 適用於小型電子設備。
- 高度：5mm系列。



## SPECIFICATIONS

Items 項目	Characteristics 特性																															
Capacitance Tolerance 靜電容量誤差	$\pm 20\%$ (120Hz,20°C)																															
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C																															
Rated Voltage Range 額定電壓範圍	4 ~ 50VDC																															
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3 ( $\mu$ A) which is greater.( After 2 minutes application of DC rated voltage, at 20 °C)																															
Dissipation Factor 散逸因素( $\tan \delta$ )	Measurement Frequency: 120Hz. Temperature: 20°C <table border="1"> <tr> <td>Rated Voltage(V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td><math>\tan \delta</math>(Max)</td> <td>0.35</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.15</td> <td>0.14</td> <td>0.13</td> </tr> </table>								Rated Voltage(V)	4	6.3	10	16	25	35	50	$\tan \delta$ (Max)	0.35	0.24	0.20	0.16	0.15	0.14	0.13								
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Low Temperature Stability 低温特性	Measurement Frequency: 120Hz. <table border="1"> <tr> <td>Rated Voltage(V)</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td><math>Z(-25^{\circ}\text{C})/Z(20^{\circ}\text{C})</math></td> <td>6</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td><math>Z(-40^{\circ}\text{C})/Z(20^{\circ}\text{C})</math></td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>								Rated Voltage(V)	4	6.3	10	16	25	35	50	$Z(-25^{\circ}\text{C})/Z(20^{\circ}\text{C})$	6	3	3	2	2	2	2	$Z(-40^{\circ}\text{C})/Z(20^{\circ}\text{C})$	12	8	5	4	3	3	3
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Load Life 負荷壽命	1000hours,with application of rated voltage at 105°C <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="7">Within <math>\pm 20\%</math> of Initial Value</td> </tr> <tr> <td><math>\tan \delta</math></td> <td colspan="7">200% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="7">Initial Specified Value or less</td> </tr> </table>								Capacitance Change	Within $\pm 20\%$ of Initial Value							$\tan \delta$	200% or less of Initial Specified Value							Leakage Current	Initial Specified Value or less						
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Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4. <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="7">Within <math>\pm 20\%</math> of Initial Value</td> </tr> <tr> <td><math>\tan \delta</math></td> <td colspan="7">200% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="7">Initial Specified Value or less</td> </tr> </table>								Capacitance Change	Within $\pm 20\%$ of Initial Value							$\tan \delta$	200% or less of Initial Specified Value							Leakage Current	Initial Specified Value or less						
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Standards 參照標準	JIS C 5101-4 (IEC 60384)																															

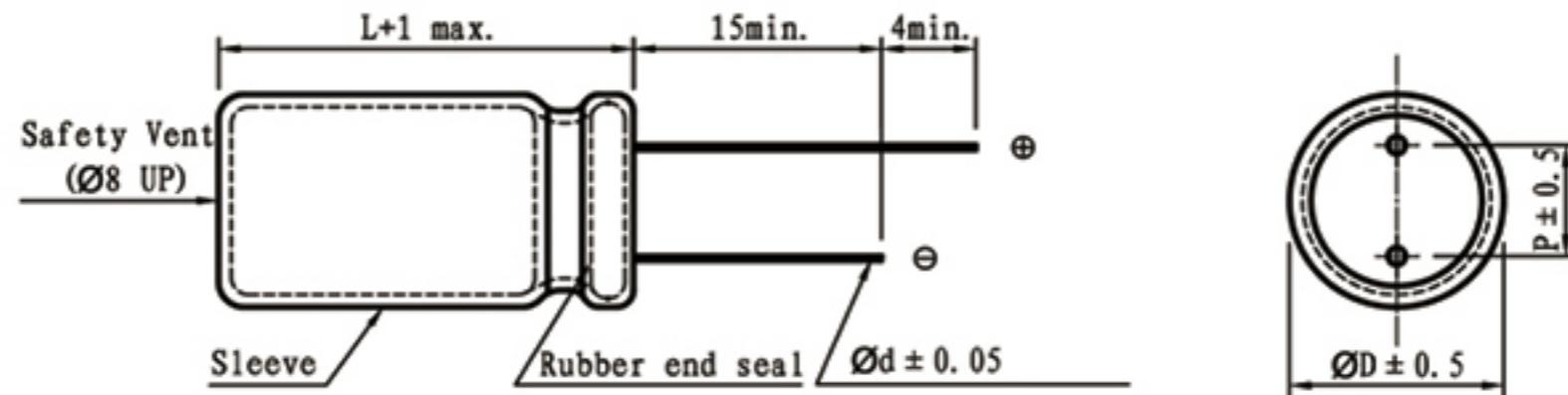
## Frequency Coefficient of Permissible Ripple Current

Capacitance ( $\mu$ F)	Frequency (Hz)			
	50	120	1K	$\geq 10K$
< 100	0.80	1.00	1.30	1.50
$\geq 100$	0.80	1.00	1.15	1.20

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

# H5 series

## DIMENSIONS(mm)



$\phi D$	4	5	6.3	8
P	1.5	2.0	2.5	2.5
$\phi d$	0.45	0.45	0.45	0.45

## STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 120Hz.

Cap ( $\mu F$ )	V	4		6.3		10		16	
		Item	D × L	R.C.	D × L	R.C.	D × L	R.C.	D × L
10						4x5	16	4x5	18
22		4x5	20	4x5	21	4x5	25	4x5	33
33		5x5	28	5x5	29	5x5	34	5x5	44
47		5x5	33	5x5	34	6.3x5	46	6.3x5	52
100		6.3x5	60	6.3x5	66	6.3x5	77	8x5	93
150		6.3x5	67	6.3x5	75	8x5	100	8x5	115
220		8x5	95	8x5	115	8x5	125		

Cap ( $\mu F$ )	V	25		35		50	
		Item	D × L	R.C.	D × L	R.C.	D × L
0.1						4x5	1.0
0.22						4x5	2.0
0.33						4x5	3.0
0.47						4x5	3.7
1						4x5	6.2
2.2						4x5	10
3.3				4x5	11	4x5	14
4.7		4x5	13	4x5	16	5x5	18
10		4x5	22	5x5	25	6.3x5	28
22		6.3x5	38	6.3x5	46	6.3x5	59
33		6.3x5	48	6.3x5	50	8x5	65
47		6.3x5	58	8x5	69	8x5	78