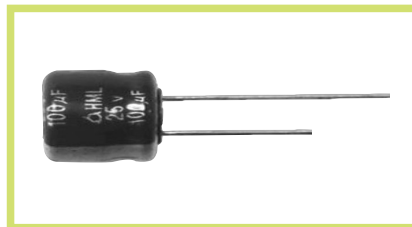


HML Series

• 105°C 3,000Hrs~5,000Hrs assured.

- Non-solvent proof.
- Long Life.
- Height 7mm~9mm.
- For LED TV PSU, DVD Driver.
- RoHS compliant.
- Halogen-free capacitors are also available.



SPECIFICATIONS

Item	Characteristics															
Rated Voltage Range	6.3 ~ 50 V _{DC}															
Operating Temperature Range	-40 ~ +105°C															
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)															
Leakage Current	I = 0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V _{DC}) (at 20°C, 2 minutes)															
Dissipation Factor(Tan δ)	<table border="1"> <tr> <td>Rated voltage(V_{DC})</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>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table> (at 20°C, 120Hz)	Rated voltage(V _{DC})	6.3	10	16	25	35	50	Tan δ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10	
Rated voltage(V _{DC})	6.3	10	16	25	35	50										
Tan δ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10										
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <tr> <td>Rated voltage(V_{DC})</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25~50</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table> (at 120Hz)	Rated voltage(V _{DC})	6.3	10	16	25~50	Z(-25°C)/Z(+20°C)	2	2	2	2	Z(-40°C)/Z(+20°C)	6	4	3	3
Rated voltage(V _{DC})	6.3	10	16	25~50												
Z(-25°C)/Z(+20°C)	2	2	2	2												
Z(-40°C)/Z(+20°C)	6	4	3	3												
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 5,000 hours at 105°C.(where 3,000 hours for ø4, 4,000 hours for ø5) Capacitance change ≤ ±30% of the initial value Tan δ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value															
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤ ±30% of the initial value Tan δ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value															
Others	Satisfied characteristics KS C IEC 60384-4															

RATINGS OF HML Series

V _{DC} / μF	6.3		10		16		25		35		50	
1											4X7 53	5X7 80
2.2											4X7 70	5X7 120
4.7											4X7 85	5X7 165
10											6.3X7 260	8X7 450
22									5X7 165	6.3X7 260	8X7 450	
33	4X7 130	5X7 165	4X7 130	5X7 165	5X7 165	5X7 165	6.3X7 260	8X7 450	8X7 450	8X7 450	8X7 450	
47	5X7 165	6.3X7 260	5X7 165	6.3X7 260	6.3X7 260	6.3X7 260	8X7 450	8X9 500	8X7 450	8X7 450		
68	6.3X7 260	8X7 450	6.3X7 260	8X7 450	8X7 450	8X7 450	8X9 500		8X7 450	8X9 500		
100	6.3X7 260	8X7 450	6.3X7 260	8X7 450	8X7 450	8X7 450						
150	6.3X7 260	8X7 450	6.3X7 260	8X7 450	8X7 450	8X7 450						
220	8X7 450	8X9 500	8X7 450	8X9 500	8X9 500							
330	8X7 450		8X9 500									
390	8X9 500											

↑ Rated Ripple Current (mA rms/105°C, 100kHz)
↑ Case Size øD x L (mm)

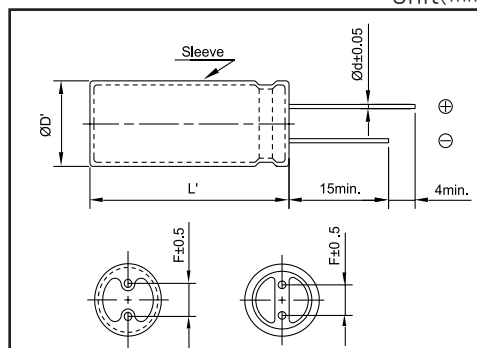
RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	50k	100k
1 ~ 150	0.40	0.75	0.90	0.95	1.00
220 ~ 390	0.50	0.85	0.94	0.97	1.00

DIMENSIONS OF HML Series

Unit(mm)



Marking : DARK BROWN SLEEVE, SILVER INK

øD	4	5	6.3	8
ød	0.45			
F	1.5	2.0	2.5	3.5
øD'	øD+0.5max			
L'	L+1.0max			

* ø8 x 9L, ød=0.60