

HMA Series

• 105°C 2,000Hrs assured.

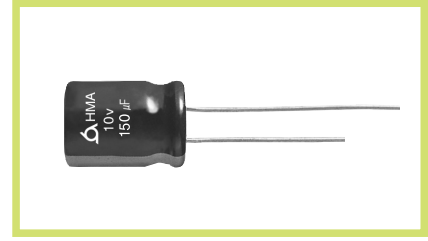
- Height 7mm.
- Wide Temperature range.
- Long Life.
- For CAR-Audio, Tuner.
- RoHS compliant.
- Halogen-free capacitors are also available.

Solvent-proof

HSA
(KMA)

Long Life

HMA



SPECIFICATIONS

Item	Characteristics															
Rated Voltage Range	6.3 ~ 50 V _{DC}															
Operating Temperature Range	-55 ~ +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(Tanδ)	<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>Tanδ(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	Tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10	
Rated Voltage(V _{DC})	6.3	10	16	25	35	50										
Tanδ(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>4</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>8</td> <td>6</td> <td>6</td> <td>3</td> </tr> </table> (at 120Hz)	Rated Voltage(V _{DC})	6.3	10	16	25~50	Z(-25°C)/Z(+20°C)	4	3	2	2	Z(-40°C)/Z(+20°C)	8	6	6	3
Rated Voltage(V _{DC})	6.3	10	16	25~50												
Z(-25°C)/Z(+20°C)	4	3	2	2												
Z(-40°C)/Z(+20°C)	8	6	6	3												
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C. Capacitance change ≤ ±20% of the initial value(when, ±25% for 6.3 V _{DC} ~16 V _{DC}) 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 ≤ ±20% of initial value(when, ±25% for 6.3 V _{DC} ~16 V _{DC}) Tan δ ≤ 200% of initial specified value Leakage current ≤ 200% of initial specified value															
Others	Satisfied characteristics KS C IEC 60384-4															

RATINGS OF HMA Series

V _{DC} μF	6.3	10	16	25	35	50
0.1						4×7 1.3
0.15						4×7 2.0
0.22						4×7 2.9
0.33						4×7 3.5
0.47						4×7 5.0
0.68						4×7 7.1
1						4×7 10
1.5						4×7 12
2.2						4×7 15
3.3					4×7 17	4×7 18
4.7				4×7 19	4×7 20	5×7 23
6.8			4×7 20	5×7 23	5×7 24	6.3×7 28
10			4×7 25	5×7 28	4×7 23	6.3×7 34
15		4×7 28	5×7 31	6.3×7 35	6.3×7 37	6.3×7 41
22	4×7 31	5×7 35	5×7 39	6.3×7 43	6.3×7 47	6.3×7 52
33	5×7 39	5×7 43	6.3×7 49	6.3×7 53	8×7 62	8×7 68
47	5×7 47	6.3×7 53	6.3×7 59	8×7 68		
68	6.3×7 57	6.3×7 63	8×7 76			
100	6.3×7 71	6.3×7 80				
150	8×7 94	8×7 94				

↑ Rated Ripple Current (mA rms/105°C, 120Hz)
 ↑ Case Size ØD×L(mm)

DIMENSIONS OF HMA Series

Unit(mm)

