# HM Series

Snap-in Terminal Type, Small Sized

JAMICON

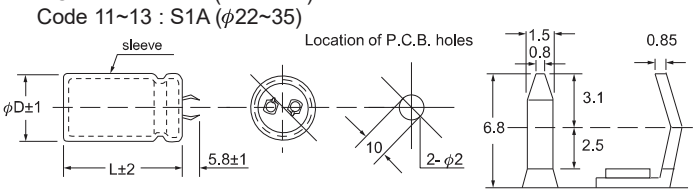
- Small case sized than HS series.
- Withstanding 2000 hours application of high ripple current at 105°C.
- Corresponding product to RoHS

## SPECIFICATION

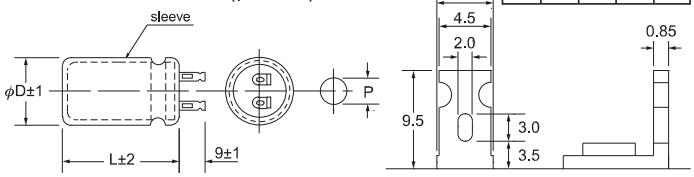
| Item | Characteristic | | | | | | |
|---|---|---|---|---|---|---|---|
| Operation Temperature Range | -25 ~ +105°C | | | | | | |
| Rated Working Voltage | 160 ~ 450VDC | | | | | | |
| Capacitance Tolerance (120Hz 20°C) | ±20%(M) | | | | | | |
| Leakage Current (20°C) | I ≦0.02CV or 3 ( mA ) *Whichever is smaller after 5 minutes<br>I : Leakage Current( μA) C : Rated Capacitance( μF) V : Working Voltage(V) | | | | | | |
| Surge Voltage (20°C) | W.V. | 160 | 200 | 250 | 350 | 400 | 450 |
| | S.V. | 200 | 250 | 300 | 400 | 450 | 500 |
| Dissipation Factor (tan δ) (120Hz 20°C) | Rated Voltage (V) | 160 | 200 | 250 | 350 | 400 | 450 |
| | tan δ | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | | |
| | Rated Voltage (V) | 160~250 | | | 350~450 | | |
| | -25°C / +20°C | 4 | | | 6 | | |
| Load Life | After 2000 hours application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≦ rate working voltage) | | | | | | |
| | Capacitance Change | ≦±20% of initial value | | | | | |
| | Dissipation Factor | ≦175% of initial specified value | | | | | |
| | Leakage current | ≦initial specified value | | | | | |
| Shelf Life | At +105°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment) | | | | | | |

## TERMINAL TYPE

▲ P.C.B. TERMINAL (SNAP IN)
Code 11~13 : S1A (φ22~35)



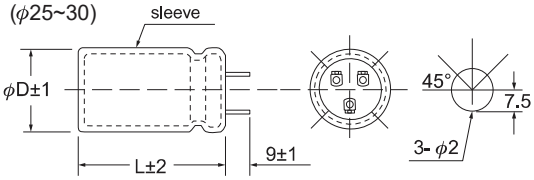

▲ LUG TERMINAL
Code 11~13 : LTA (φ22~35)

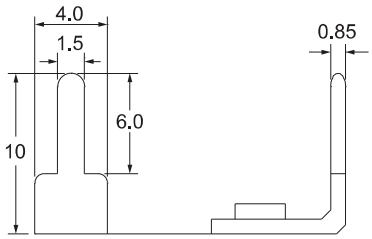



| φD | 22 | 25 | 30 | 35 |
|---|---|---|---|---|
| P | 8 | 10 | 10 | 14 |

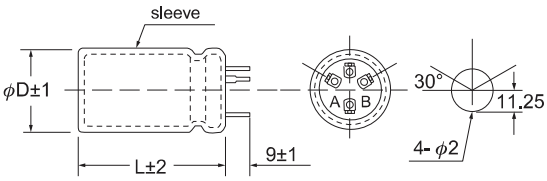
▲ P.C.B. TERMINAL
Code 11~13 : LBA (φ25~30), LCA (φ35)

(φ25~30)




(φ35)
A.B. blank terminals




## RIPPLE CURRENT COEFFICIENTS

| Temperature(°C) | 40 | 60 | 70 | 85 | 105 |
|---|---|---|---|---|---|
| Multiplier | 2.50 | 2.20 | 2.00 | 1.80 | 1.00 |

| Frequency(Hz) | 60 | 120 | 400 | 1k | 10k |
|---|---|---|---|---|---|
| W.V. | Multiplier | | | | |
| ≧160V | 0.80 | 1.00 | 1.10 | 1.30 | 1.40 |

## CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : A(rms) 105°C 120Hz

| μF \ V(DC) / φD | 160 | | | | 200 | | | | 250 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 22 | 25 | 30 | 35 | 22 | 25 | 30 | 35 | 22 | 25 | 30 | 35 |
| 220 | | | | | | | | | 25 | | | |
| | | | | | | | | | 0.89 | | | |
| 270 | | | | | | | | | 25 | | | |
| | | | | | | | | | 0.94 | | | |
| 330 | | | | | | | | | 30 | 25 | | |
| | | | | | | | | | 1.12 | 1.12 | | |
| 390 | | | | | 25 | | | | 35 | 25 | | |
| | | | | | 1.29 | | | | 1.30 | 1.21 | | |
| 470 | 25 | | | | 30 | | | | 40 | 30 | 25 | |
| | 1.44 | | | | 1.44 | | | | 1.42 | 1.36 | 1.41 | |
| 560 | 30 | | | | 30 | 25 | | | 45 | 35 | 25 | |
| | 1.48 | | | | 1.48 | 1.48 | | | 1.54 | 1.49 | 1.44 | |
| 680 | 30 | 25 | | | 40 | 30 | | | 50 | 40 | 30 | 25 |
| | 1.63 | 1.63 | | | 1.84 | 1.75 | | | 1.78 | 1.73 | 1.71 | 1.75 |
| 820 | 35 | 30 | 25 | | 45 | 35 | 25 | | | 45 | 35 | 30 |
| | 1.84 | 1.85 | 1.92 | | 2.05 | 1.98 | 1.92 | | | 1.93 | 1.92 | 1.98 |
| 1000 | 40 | 35 | 25 | | 50 | 45 | 30 | 25 | | | 40 | 30 |
| | 2.10 | 2.13 | 2.07 | | 2.31 | 2.37 | 2.22 | 2.28 | | | 2.19 | 2.13 |
| 1200 | | 40 | 30 | 25 | | 50 | 35 | 30 | | | 45 | 35 |
| | | 2.30 | 2.27 | 2.33 | | 2.54 | 2.42 | 2.49 | | | 2.35 | 2.32 |
| 1500 | | 45 | 35 | 30 | | | 40 | 30 | | | | 45 |
| | | 2.42 | 2.41 | 2.49 | | | 2.55 | 2.49 | | | | 2.56 |
| 1800 | | 50 | 40 | 30 | | | 45 | 40 | | | | 50 |
| | | 2.56 | 2.58 | 2.52 | | | 2.71 | 2.82 | | | | 2.71 |
| 2200 | | | 45 | 35 | | | | 45 | | | | |
| | | | 2.89 | 2.85 | | | | 3.16 | | | | |
| 2700 | | | 50 | 40 | | | | | | | | |
| | | | 3.13 | 3.11 | | | | | | | | |
| 3300 | | | | 50 | | | | | | | | L(mm) |
| | | | | 3.77 | | | | | | | | R.C. |

| μF \ V(DC) / φD | 350 | | | | 400 | | | | 450 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 22 | 25 | 30 | 35 | 22 | 25 | 30 | 35 | 22 | 25 | 30 | 35 |
| 68 | | | | | | | | | 25 | | | |
| | | | | | | | | | 0.47 | | | |
| 82 | | | | | | | | | 30 | | | |
| | | | | | | | | | 0.55 | | | |
| 100 | | | | | 25 | | | | 30 | 25 | | |
| | | | | | 0.61 | | | | 0.61 | 0.61 | | |
| 120 | 25 | | | | 30 | | | | 35 | 30 | | |
| | 0.58 | | | | 0.72 | | | | 0.71 | 0.72 | | |
| 150 | 30 | | | | 30 | 25 | | | 40 | 30 | 25 | |
| | 0.71 | | | | 0.80 | 0.80 | | | 0.85 | 0.81 | 0.84 | |
| 180 | 30 | 25 | | | 35 | 30 | | | 45 | 40 | 30 | |
| | 0.73 | 0.73 | | | 0.89 | 0.90 | | | 0.93 | 0.95 | 0.93 | |
| 220 | 35 | 30 | | | 45 | 35 | 25 | | | 45 | 30 | 25 |
| | 0.87 | 0.87 | | | 1.10 | 1.06 | 1.03 | | | 1.10 | 1.03 | 1.06 |
| 270 | 40 | 30 | 25 | | 50 | 40 | 30 | 25 | | 50 | 40 | 30 |
| | 0.96 | 0.92 | 0.95 | | 1.21 | 1.18 | 1.16 | 1.19 | | 1.21 | 1.22 | 1.19 |
| 330 | 45 | 40 | 30 | | | 45 | 35 | 30 | | | 45 | 35 |
| | 1.12 | 1.15 | 1.13 | | | 1.37 | 1.37 | 1.41 | | | 1.42 | 1.40 |
| 390 | | 45 | 35 | | | 50 | 40 | 30 | | | 50 | 40 |
| | | 1.31 | 1.31 | | | 1.56 | 1.58 | 1.54 | | | 1.61 | 1.60 |
| 470 | | 50 | 35 | 30 | | | 45 | 35 | | | | 45 |
| | | 1.42 | 1.36 | 1.40 | | | 1.72 | 1.69 | | | | 1.75 |
| 560 | | | 45 | 35 | | | 50 | 40 | | | | 50 |
| | | | 1.55 | 1.53 | | | 1.85 | 1.84 | | | | 1.88 |
| 680 | | | 50 | 40 | | | | 45 | | | | |
| | | | 1.79 | 1.78 | | | | 2.12 | | | | |
| 820 | | | | 45 | | | | | | | | L(mm) |
| | | | | 1.97 | | | | | | | | R.C. |