

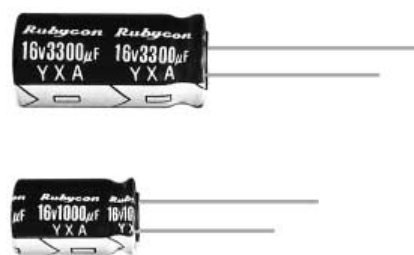
## YXA SERIES

### 105°C Miniaturized

YXA

Low Impedance

**YXF, YXG, ZL, ZLH**

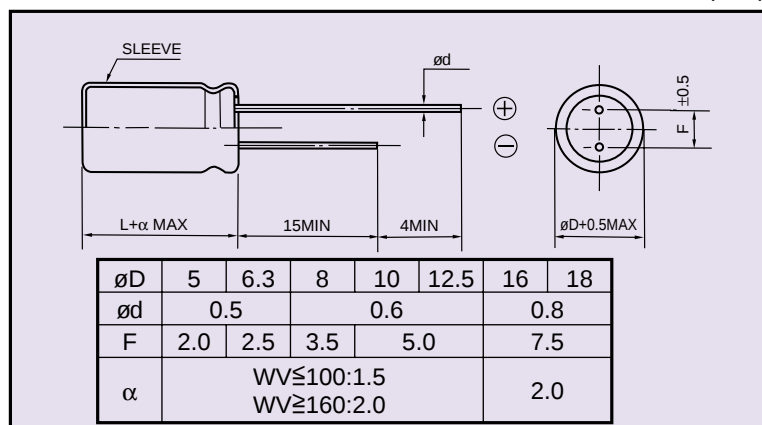


## ◆ SPECIFICATIONS

| Items                                          | Characteristics                                                                                                                          |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--------------------------------------------|-------------------------|--|--|--------------------------|--|--------------------|----------|--------------------------|-----------------|--|
| Category Temperature Range                     | -55~+105°C                                                                                                                               |  |  |  |                                            | -40~+105°C              |  |  |                          |  | -25~+105°C         |          |                          |                 |  |
| Rated Voltage Range                            | 6.3~100V.DC                                                                                                                              |  |  |  |                                            | 160~250V.DC             |  |  |                          |  | 350~450V.DC        |          |                          |                 |  |
| Capacitance Tolerance                          | ±20%(20°C, 120Hz)                                                                                                                        |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
| Leakage Current(MAX)                           | 6.3~100V.DC                                                                                                                              |  |  |  |                                            |                         |  |  | 160~450V.DC              |  |                    |          |                          |                 |  |
|                                                | I=0.01CV or 3μA whichever is greater.<br>(After 2 minutes application of rated voltage)                                                  |  |  |  |                                            |                         |  |  | CV≤1000                  |  |                    |          | CV>1000                  |                 |  |
|                                                |                                                                                                                                          |  |  |  |                                            |                         |  |  | I=0.1CV+40μA (1minute)   |  |                    |          | I=0.04CV+100μA (1minute) |                 |  |
|                                                |                                                                                                                                          |  |  |  |                                            |                         |  |  | I=0.03CV+15μA (5minutes) |  |                    |          | I=0.02CV+25μA (5minutes) |                 |  |
|                                                | I=Leakage Current(μA)                                                                                                                    |  |  |  |                                            | C=Rated Capacitance(μF) |  |  |                          |  | V=Rated Voltage(V) |          |                          |                 |  |
| Dissipation Factor(MAX)                        | Rated Voltage (V) 6.3 10 16 25 35 50 63 100 160 200 250 350 400 450 (20°C, 120Hz)                                                        |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|                                                | tan δ 0.26 0.22 0.18 0.16 0.14 0.12 0.10 0.08 0.20 0.20 0.20 0.24 0.24 0.24                                                              |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|                                                | When rated capacitance is over 1000μF, tan δ shall be added 0.02 to the listed value with increase of every 1000μF.                      |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
| Endurance                                      | After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements. |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|                                                | Capacitance Change                                                                                                                       |  |  |  | Within ±25% of the initial value.          |                         |  |  |                          |  |                    | Case Dia |                          | Life Time (hrs) |  |
|                                                | Dissipation Factor                                                                                                                       |  |  |  | Not more than 200% of the specified value. |                         |  |  |                          |  |                    | øD≤8     |                          | 1000            |  |
|                                                | Leakage Current                                                                                                                          |  |  |  | Not more than the specified value.         |                         |  |  |                          |  |                    | øD=10    |                          | 2000            |  |
| Low Temperature Stability Impedance Ratio(MAX) | Rated Voltage (V) 6.3 10 16 25 35 50 63 100 160 200 250 350 400 450 (120Hz)                                                              |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|                                                | Z(-25°C)/Z(20°C) 4 3 2 2 2 2 2 2 2 3 3 3 6 6 6                                                                                           |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |
|                                                | Z(-40°C)/Z(20°C) 8 6 4 4 3 3 3 3 — — — — — —                                                                                             |  |  |  |                                            |                         |  |  |                          |  |                    |          |                          |                 |  |

## ◆ DIMENSIONS

(mm)



### ◆ MULTIPLIER FOR RIPPLE CURRENT

(1)Frequency coefficient

| Frequency<br>(Hz) |              | 60(50) | 120  | 500  | 1k   | 10k≤ |
|-------------------|--------------|--------|------|------|------|------|
| Coefficient       | 0.1~1μF      | 0.50   | 1.00 | 1.20 | 1.30 | 1.50 |
|                   | 2.2~4.7μF    | 0.65   | 1.00 | 1.20 | 1.30 | 1.50 |
|                   | 10~47μF      | 0.80   | 1.00 | 1.20 | 1.30 | 1.50 |
|                   | 100~1000μF   | 0.80   | 1.00 | 1.10 | 1.15 | 1.20 |
|                   | 2200~22000μF | 0.80   | 1.00 | 1.05 | 1.10 | 1.15 |

(2) Temperature coefficient

|                             |     |     |     |
|-----------------------------|-----|-----|-----|
| Ambient Temperature<br>(°C) | 105 | 85  | 65≥ |
| Coefficient                 | 1.0 | 1.7 | 2.1 |

## ♦PART NUMBER

|               |            |                   |                       |            |              |            |
|---------------|------------|-------------------|-----------------------|------------|--------------|------------|
| <u>□□□</u>    | <u>YXA</u> | <u>□□□□□</u>      | <u>□</u>              | <u>□□□</u> | <u>□□</u>    | <u>DxL</u> |
| Rated Voltage | Series     | Rated Capacitance | Capacitance Tolerance | Option     | Lead Forming | Case Size  |

◆ **STANDARD SIZE, RATED RIPPLE CURRENT**

Size  $\varnothing D \times L$ (mm), Ripple Current (mA r.m.s./105°C, 120Hz)[illegible][illegible]