

**FEATURES**

- Compact size and energy dense
- Higher voltage
- Quick charge and discharge
- RoHS & Reach compliant

**APPLICATIONS**

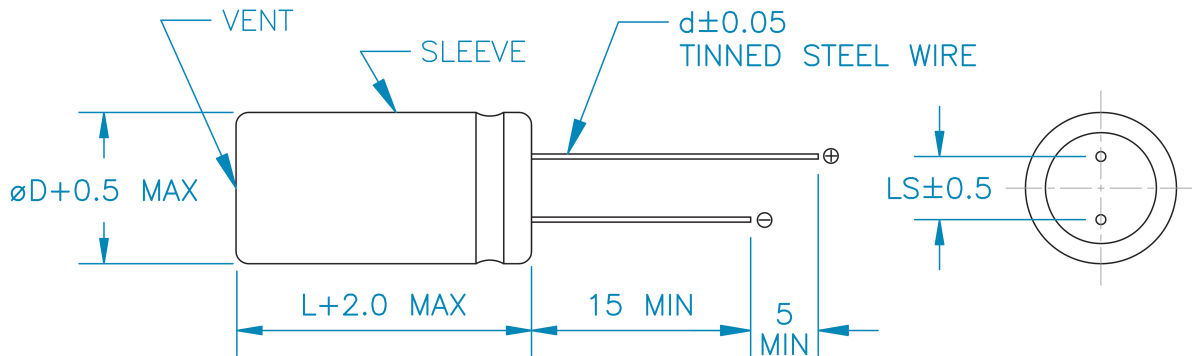
- Pulse power demand
- Ride thru power support
- Back up power
- Stand alone or augment existing energy/power source




**GENERAL SPECIFICATIONS**

| Item  | Performance  |
|---|--|
| Operating temperature   | -15°C to +70°C @ 3.8V<br>-15°C to +85°C @ 3.5V   |
| Storage temperature   | -25°C to +70°C   |
| Capacitance   | 50F  |
| Capacitance tolerance   | +/-20%   |
| Rated voltage   | 3.8 VDC / 3.5 VDC  |
| Minimum rated voltage   | 2.2 VDC  |
| Surge voltage   | 4.2 VDC  |
| Temperature characteristics   | Capacitance change: Within ±50% of initial measured value at +25°C (-15°C to +70°C)<br>Internal resistance: Within ±800% of initial measured value at +25°C (at -15°C) |
| Endurance<br>(At rated voltage & max. operating temp)                     | After 1000 hours:<br>Capacitance change: ±30% of initial rated value<br>Internal resistance: Within 2 times of initial specified value                                 |
| Projected cycle life<br>(From rated voltage to 1/2 rated voltage at 25°C) | After 500,000 cycles:<br>Capacitance change: Within ±30 % of initial rated value<br>Internal resistance: Within 2 times of initial specified value                     |
| Shelf life  | After 1000 hours storage, at 70°C without load, the capacitor shall meet the specified endurance limits.   |

**DIMENSIONS**



**STANDARD PRODUCTS**

| Part Number        | UL  | Nom. Cap. (F) | ESR AC (mΩ) (1 KHz) | ESR DC Typical (mΩ) | Leakage Current (mA) | Dimensions (mm) |    |     |    | Rated Current (A) | Max Current (A) | Weight/Unit (grams) |
|--------------------|---|---------------|---------------------|---------------------|----------------------|-----------------|----|-----|----|-------------------|-----------------|---------------------|
|                    |   |               |                     |                     |                      | D               | L  | d   | LS |                   |                 |                     |
| TPLC-3R8/50MR10X20 |  | 50            | 235                 | 445                 | 0.002                | 10              | 20 | 0.6 | 5  | 0.3               | 2.8             | 3                   |