

FEATURES

- Extremely low ESR
- 10 year service life
- RoHS/REACH compliant
- Halogen Free
- UL recognized



APPLICATIONS

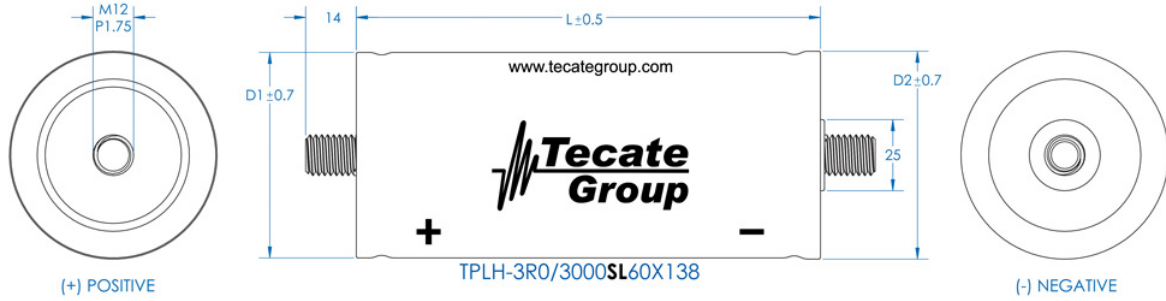
- Peak power handling
- Industrial automation
- UPS/voltage hold up



GENERAL SPECIFICATIONS

Item	Performance
Operating temperature	-40°C to +65°C
Storage temperature	-40°C to +70°C
Capacitance	650F
Rated voltage	3 VDC
Surge voltage	3.2 VDC
Temperature characteristics	Capacitance change: Within $\pm 5\%$ of initial measured value at +25°C (-40°C to +65°C) Internal resistance: Within $\pm 50\%$ of initial measured value at +25°C (at -40°C)
Endurance (At rated voltage & max. operating temp)	After 1500 hours: Capacitance change: Within $\pm 20\%$ of initial rated value Internal resistance: Within 2 times of initial specified value
Projected Load life (At rated voltage & 25°C)	10 years: Capacitance change: Within $\pm 20\%$ of initial rated value Internal resistance: Within 2 times of initial specified value
Projected cycle life (From rated voltage to 1/2 rated voltage at 25°C)	1,000,000 cycles between Vr and $\frac{1}{2}$ Vr: Capacitance change: Within $\pm 20\%$ of initial rated value Internal resistance: Within 2 times of initial specified value
Shelf life	After 4 years at 25°C without load, the capacitor shall meet the specified endurance limits.

DIMENSIONS



STANDARD PRODUCTS

Part Number	Nom. Cap. (F)	GMV (F)*	ESR DC (mΩ)	ESR AC (mΩ)	Leakage Current (mA) (72 hrs @ 25C)	Dimensions (mm)			Rated Current (A)	Weight/Unit (grams)
						D1	D2	L		
TPLH-3R0/650SL60X51	650	650	0.6	0.35	1.5	60	60.7	51.5	590	210

*NOTE: GMV = Guaranteed Minimum Value.