

LS Mtron Ultracapacitor Transportation Regulations

Transport of EDLC (Electric Double Layer Capacitor)

All LS Ultracapacitor follows UN No. 3499, 'Capacitor, electric double layer'.

General Information

1. UN Number: UN3499
2. Proper Shipping Name : Capacitor, electric double layer
(with an energy storage capacity greater than 0.3Wh)

Note: Capacitors not exceeding 0.3Wh are not subject to DGR.

3. Packing Instruction Number : PI 971
4. Applicable Special Provision Number : 361 (A186 in ICAO / IATA & 173, 176 US DOT)
5. Types: Capacitor and Capacitor in Module.

There are two transport categories, capacitor or module itself and capacitor or module in equipment.

Item	Standard	Marking
1) Capacity < 0.3wh (100F, 120F)	Not Subject to DGR	Capacitor must be marked with the energy storage capacity in Wh
2) 0.3wh < Capacity ≤10wh (350F ~ 3400F)	UN3499	
3) 10wh < Capacity (Module)	UN3499	

Item	Drop	Protection	Pressure differential
1)	LS ultracapacitor is designed to withstand 1.2m drop test	LS ultracapacitor or module is protected against short circuit or fitted with a metal strap connecting terminals.	LS ultracapacitor is designed to withstand a 95 kPa pressure differential.
2)			
3)	-		

- . Not more than 10Wh energy capacity ; Not subject to other provisions when capable of withstanding a 1.2m drop test unpackaged on an unyielding surface without loss of contents.
- . Capacitors contained in equipment ; Not subject to other provisions provided the equipment is packed in a strong outer packaging constructed of suitable material and of adequate strength and design in relation to the packaging intended use and in such a manner as to prevent accidental functioning of capacitors during transport.