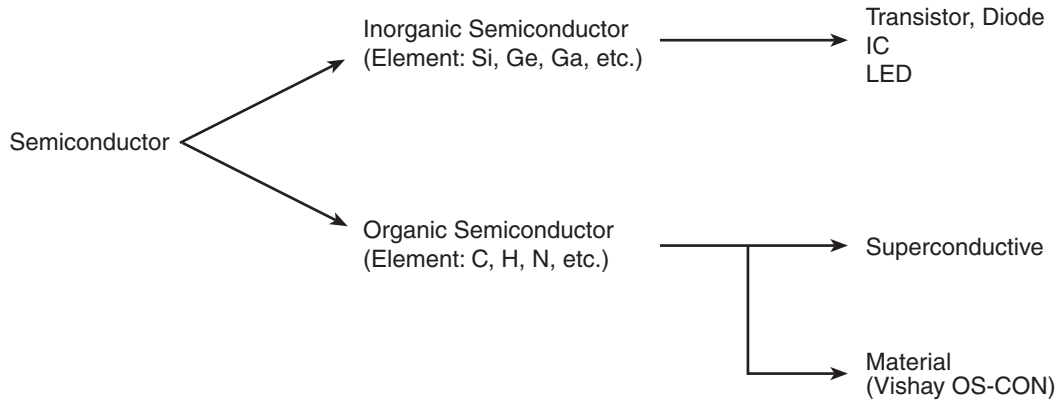


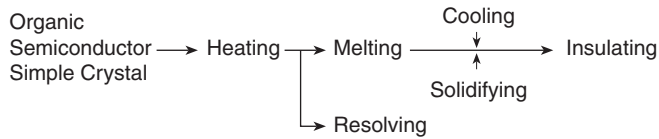
## Solid Aluminum Capacitors With Organic Semiconductor Electrolyte

### VISHAY OS-CON SEMICONDUCTOR

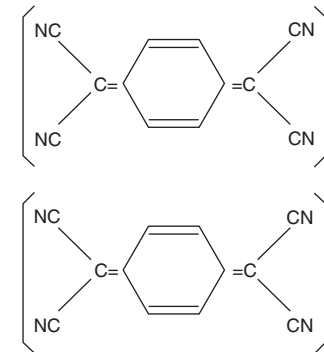
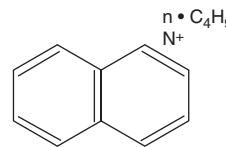


### VISHAY OS-CON ORGANIC SEMICONDUCTOR

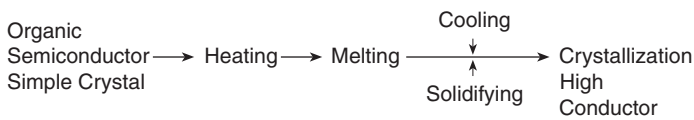
#### Conventional Organic Semiconductor



#### TCNQ Complex Salt



#### Developed Organic Semiconductor



N-n-butyl Isoquinolinium (TCNQ)<sub>2</sub>

### FEATURES OF ORGANIC SEMICONDUCTOR AS ELECTROLYTE

- High conductivity (low resistance value) compared to other electrolytes.
- High conductivity provides stability against temperature.

TYPE OF CAPACITOR	TYPE OF ELECTROLYTE	CONDUCTIVITY (mS/cm)*
Non-solid Electrolyte Capacitor	Electrolyte Solution	3
Solid Electrolyte Capacitor	Manganese Dioxide	30
Vishay OS-CON Capacitor	Organic Semiconductor	300

\*Conductivity comparisons are abbreviated values.

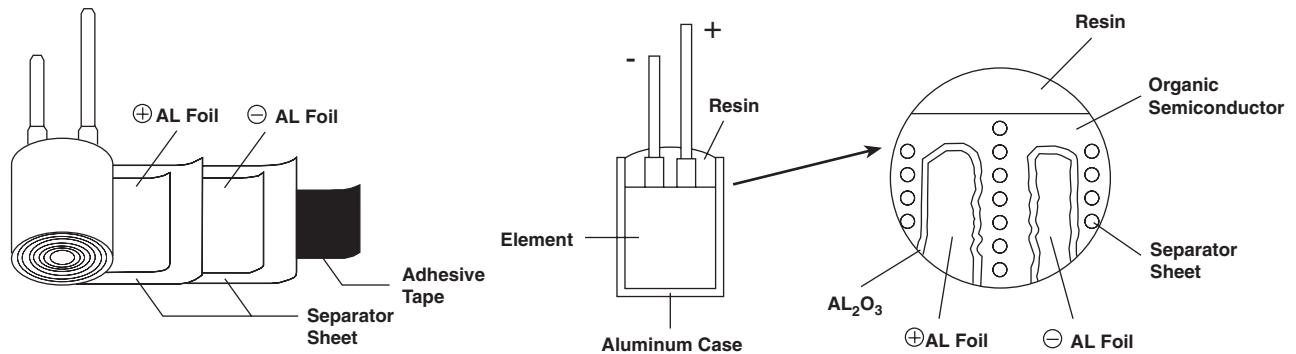


# Construction and Characteristics

Solid Aluminum Capacitors  
With Organic Semiconductor Electrolyte

Vishay OS-CON

## CONSTRUCTION



Vishay OS-CON capacitors are roughly the same construction as an aluminum electrolytic capacitor, and uses a rolled aluminium foil in its capacitor element. Vishay OS-CON differs from the aluminium electrolyte capacitor in that in place of the electrolyte solution, organic semiconductor crystal is impregnated, and the Vishay OS-CON capacitor is encased with an epoxy resin instead of a rubber encasing (Type 94SVP has a rubber encasing, others have resin encasing).

## MANUFACTURING PROCESS

