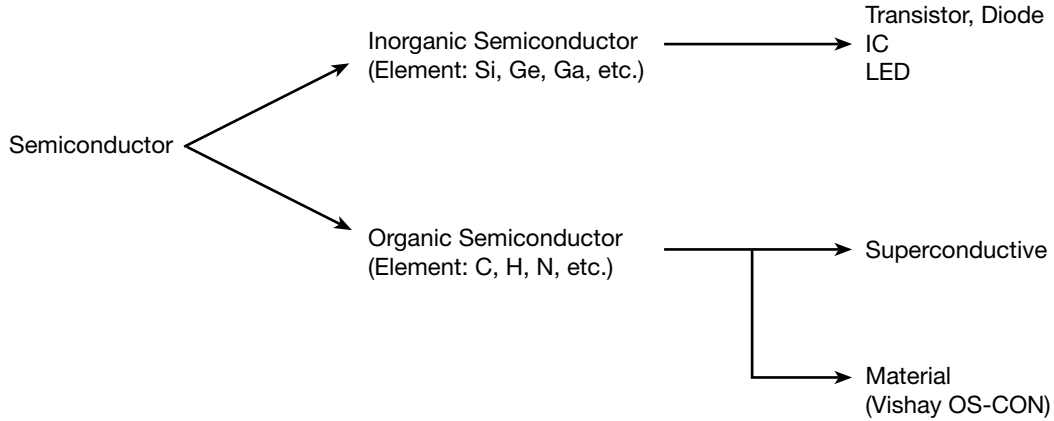


Solid Aluminum Capacitors with Organic Semiconductor Electrolyte

VISHAY OS-CON SEMICONDUCTOR


VISHAY OS-CON ORGANIC SEMICONDUCTOR	
<p>Conventional Organic Semiconductor</p> <p>Organic Semiconductor Simple Crystal → Heating → Melting → Cooling → Insulating</p> <p style="margin-left: 100px;">↓ Solidifying</p> <p style="margin-left: 100px;">↑ Resolving</p>	<p>TCNQ Complex Salt</p> <div style="text-align: center;"> </div> <p style="text-align: center;">N-n-butyl Isoquinolinium (TCNQ)₂</p>
<p>Developed Organic Semiconductor</p> <p>Organic Semiconductor Simple Crystal → Heating → Melting → Cooling → Crystallization High Conductor</p> <p style="margin-left: 100px;">↓ Solidifying</p>	

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) ⁽¹⁾
Non-solid Electrolyte Capacitor	Electrolyte Solution	3
Solid Electrolyte Capacitor	Manganese Dioxide	30
Vishay OS-CON Capacitor	Organic Semiconductor	300

Note

⁽¹⁾ Conductivity comparisons are abbreviated values.