



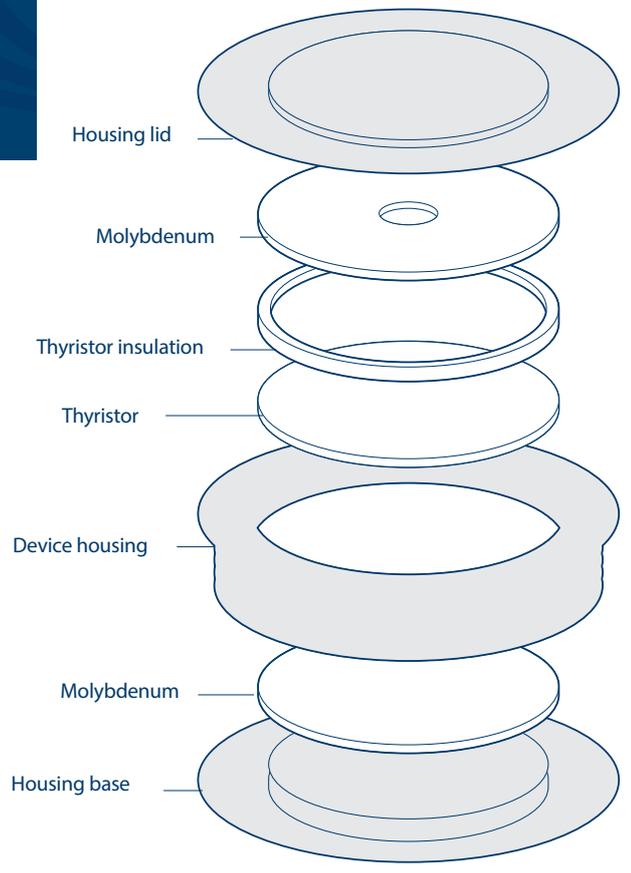
## Highly Reliable Bipolar Thyristor & Diode Devices

Dynex has an established Bipolar engineering design team and a complete in-house manufacturing production line, from wafer fabrication through to testing.

The devices are tailored for a broad range of applications and provide low losses, high blocking voltages and high current capability.

### Key Features

- ✓ Thinner silicon, lower conduction losses
- ✓ Unique bevel maximises current and surge ratings
- ✓ Advanced implanted aluminium diffusion techniques
- ✓ Full blocking voltage capability at line frequencies from -40°C to +125°C
- ✓ Double side cooling
- ✓ High surge current capability
- ✓ Fault protection
- ✓ Double side cooling
- ✓ Low losses for high efficiency
- ✓ Low thermal resistance



### Applications



## Thyristor Discrete Devices

### Gate Turn-off



- Double side cooling
- High reliability in service
- High voltage capability
- Fault protection without fuses
- High surge current capability
- Turn-off capability

### Phase Control



- Currents up to 7610 A
- Voltage up to 8500 V
- Full blocking voltage capability at line frequencies from -40°C to +125°C
- High surge current capability
- High di/dt turn-on capability
- High dV/dt capability

### Asymmetric Bypass



- Low dynamic on-state voltage for high-performance fault protection
- Enhanced surge rating
- High dV/dt capability >10kV/μs
- High di/dt capability
- Device can be switched from low anode-cathode voltage

### Pulse Power



- Asymmetric design
- Single or repetitive pulse applications
- Very high di/dt capability
- Fully floating silicon technology
- High "shot life"
- High reliability / life
- Designed as a closing switch

## Diode Discrete Devices

### Rectifier Diodes



- Currents up to 8800A
- Voltage up to 9000 V
- High overload capability
- Low losses for high efficiency
- Hermetically sealed for long operational life
- Low thermal resistance

### Flat Base Rectifier Diodes



- Currents up to 860A
- Voltage up to 6000V
- Low losses for high efficiency
- Hermetically sealed for long operational life
- Anode to base & cathode to base
- Selections available for parallel operation

### Fast Recovery Diodes



- Currents up to 3200A
- Voltage up to 6000V
- Lifetime controlled for fast recovery, low recovery charge
- Low transient turn-on voltage
- High surge capability
- Double side cooling

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