

IGBT Modules

Power Cycling with the latest generation IGBT die

The Dynex manufacturing plant is a vertically integrated facility with device design, wafer fab, packaging, qualification and testing available on site.

Through initial concept to full production, Dynex support your requirements to provide enhanced, reliable device outlines to meet your specific demands.

Using our in-house design team, Dynex continue to develop processes and designs to utilise the latest techniques to improve cooling, current output, lifetime and reliability.

Great emphasis is placed on low inductance power bus bar designs, enabling the modules to function under fast switching transients such as, those of next generation Trench Gate IGBT's and SiC MOSFET.

Key Features

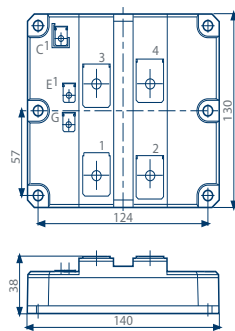
- High DC stability via advanced edge termination design and passivation
- High short circuit capability- wide SCSOA
- Self-limiting short circuit current
- Temperature conditions from -40/-50°C up to +150°C
- Low switching losses
- $T(vj\ op) = 150^{\circ}\text{C}$
- AlSiC Baseplate for increased thermal cycling capability
- Package design with CTI > 600
- Isolated base plate
- 400A to 3600A at 750V to 6500V

Applications

- High reliability inverters
- Motor controllers
- Traction drives
- Different circuit topologies (half bridge, single switch, chopper)

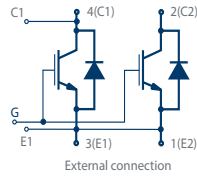
Package Type: N

Nominal weight: 1000g



Single Switch - NSM

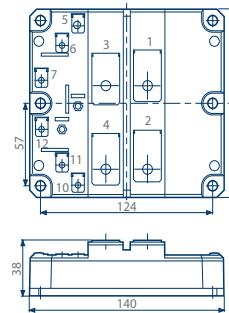
External connection



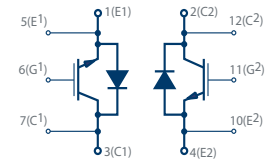
C1 - Aux Collector
E1 - Aux Emitter
G - Gate

Package Type: D

Nominal weight: 1000/ 1600g

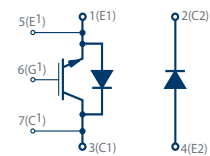


Dual Switch - DDM/S



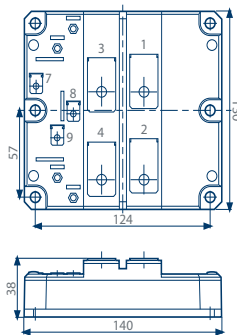
C1 and C2 - Aux Collector
E1 and E2 - Aux Emitter
G1 and G2 - Gate

Chopper switch - DCM/S



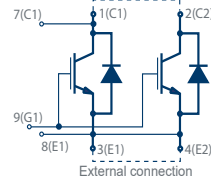
Package Type: F

Nominal weight: 1000g/ 1600g



Single Switch - FSM/S

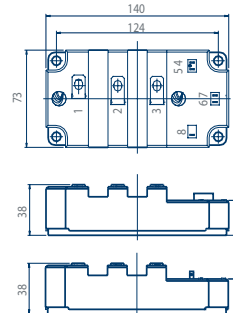
External connection



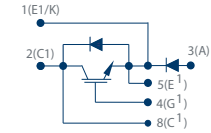
C1 - Aux Collector
E1 - Aux Emitter
G1 - Gate

Package Type: P

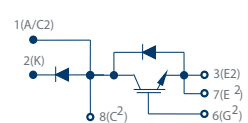
Nominal weight: 500g



Chopper High Side - PKM

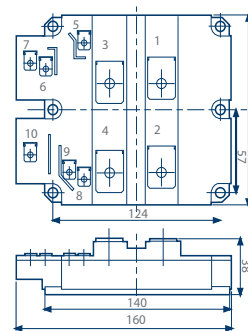


Chopper Low Side - PLM

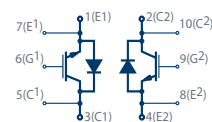


Package Type: G

Nominal weight: 1000g

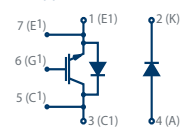


Dual Switch - GDM



C1 and C2 - Aux Collector
E1 and E2 - Aux Emitter
G1 and G2 - Gate

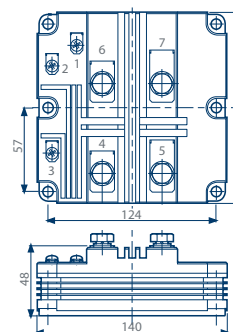
Chopper Switch - GCM



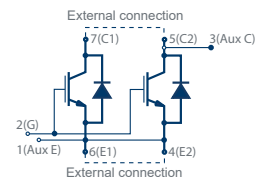
C1 and C2 - Aux Collector
E1 and E2 - Aux Emitter
G1 and G2 - Gate

Package Type: X

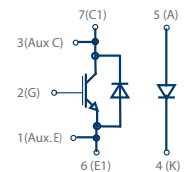
Nominal weight: 1100g



Single Switch - XSM

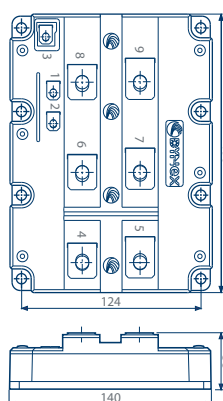


Chopper Switch - XCM

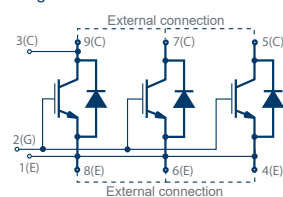


Package Type: E

Nominal weight: 1700g



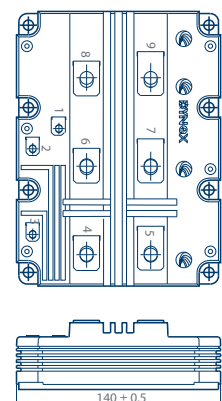
Single Switch - ESM



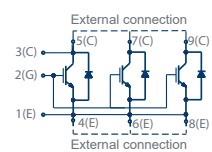
3 - Aux Collector
2 - Gate
1 - Aux Emitter

Package Type: A

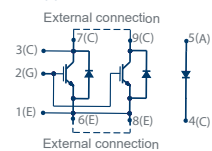
Nominal weight: 1700g



Single Switch - ASM



Chopper Switch - ACM



3 - Aux Collector
2 - Gate
1 - Aux Emitter