

R&D Electronics Newsletter (2016 Issue 7)

Welcome to our 7th issue of newsletters in 2016!

TECHSEM is the leading Chinese developer and manufacturer of **diode / thyristor modules and capsules (press pack)** with more than 50 years experience.

R&D Electronics is the **exclusive marketing and sales channel for TECHSEM** with the worldwide sales network and our own B2B e-commerce-portal www.rd-ebusiness.com.

In this issue we would like to present some special power modules from TECHSEM and a summary of product features and the customer benefits as well.

All of our newsletters are archived in our online-shop. More information is available under: www.rd-ebusiness.com

Yours faithfully

R&D Electronics Team

SPECIAL POWER MODULES FROM TECHSEM

1. Extra-High Power Module:



- Current: 800-1200A;
- Voltage: 600 – 3600V;
- Circuit Topology: Diode-Diode, Thyristor-Diode, Thyristor-Thyristor, Single Diode and Single Thyristor;
- Main Applications: Soft starter, Rectifier for drives applications, Power controllers, Rectifier for UPS, Battery chargers, Static switches, Bypass switches, Crowbar application.

2. Water-Cooled Power Module:



- Smaller size for same power;
- Cost efficient;
- Circuit Topology: Diode-Diode, Thyristor-Diode, Thyristor-Thyristor, Single Diode and Single Thyristor;
- Main Application: Soft starter, Rectifier for drives applications, Power controllers, Rectifier for UPS, Battery chargers, Static switches, Bypass switches, Crowbar application.

3. Special Topology Module:

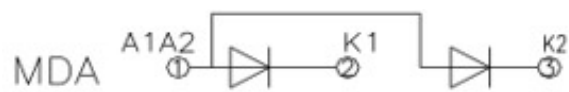


Fig.1: Common Anode Diode Module



Fig.2: Common Cathode Diode Module

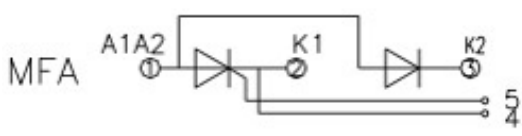


Fig.3: Common Anode TD Module

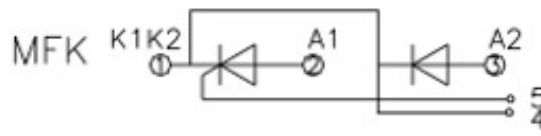


Fig.4: Common Cathode TD Module

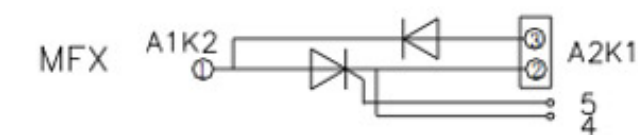


Fig.5: Antiparallel TD Module

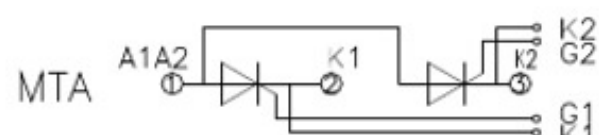


Fig.6: Common Anode Thyristor Module

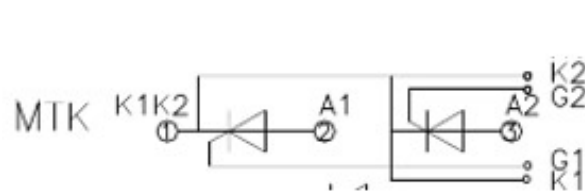


Fig.7: Common Cathode Thyristor Module

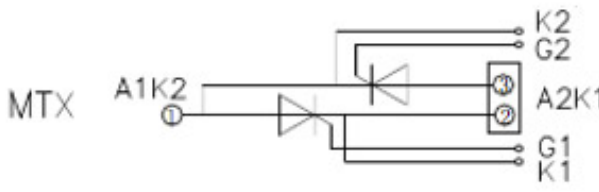


Fig.8: Antiparallel Thyristor Module

4. Fast Turn-off / Fast Recovery Module:



- $t_q=12\mu s$ at $T_c=100^\circ C$;
- $t_{rr}=1.5\mu s$ at $T_c=140^\circ C$;
- Current: 50-400A;
- Voltage: 600-1800V.
- Main Applications: Inverter, Inductive Heating, Welder, Chopper, Various Switching Power Supply.

TECHSEM Product Features and Customer Benefits

Product Features	Customer Benefits
Product portfolio from chip to power assemblies	➔ Easy buying, better quality assurance
CE, UL and European RoHS certified	➔ Safety, health and environment protected
More than 5000 different products	➔ Less procurement costs
Product reliability test up to 20,000 power cycles	➔ Higher reliability
2 x passivation layers on chip	➔ Higher Product Stability
Pressure contact technology for Power Modules	➔ Longer lifetime, higher safety margin
Single power module up to 3600V/1200A, single capsule device up to 7200V/8000A	➔ Cost savings by compacter design
Products with special configurations like common-anode or common-cathode modules	➔ Cost savings by flexible design
Products for special application (e.g. pulse thyristor with $di/dt = 8kA/\mu s$)	➔ Less costs due to more choices
Products according to customer special requirements (e.g. selection for series / parallel circuits)	➔ Cost savings by less internal efforts
Extra epoxy layer in the power modules for better humidity protection	➔ Cost savings by less product failures
100% additional function test shortly before shipment	➔ No wrong products or wrong shipment

Free Samples

You want to test our products? No problem. We provide now for certain types of products with limited quantities as free samples at your disposal. For the available products, you only need to pay for the shipping costs from Hong Kong to your delivery address. Do not hesitate to register as customer in our shop and contact us for free samples of your choice: www.rd-ebusiness.com.