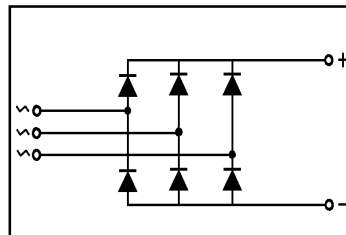


Diode Modules TG-PAK

### Features

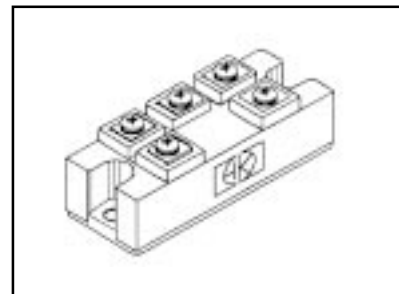
- International standard package
- With DBC ceramic base plate
- Planar passivated chips
- High surge capability
- Complies With RoHS Directive;
- Lead Free;



**IDAVM = 70A**  
**VRRM = 800-1600V**

### Benefits

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Field supply for DC motors
- Battery DC power supplies



### Absolute Maximum Ratings

Symbol	Test Conditions	Max.	Units
VRRM		800, 1200, 1400, 1600	V
IDAVM	Tc=100°C, module	70	A
IFSM	Tvj=45°C; t=10ms (50 Hz),sine	840	A
	Vr=0 t=8.3ms (60 Hz),sine	890	A
	Tvj=150°C; t=10ms (50 Hz),sine	800	A
	Vr=0 t=8.3ms (60 Hz),sine	840	A
I²t	Tvj=45°C; t=10ms (50 Hz),sine	3500	A²s
	Vr=0 t=8.3ms (60 Hz),sine	4000	A²s
	Tvj=150°C; t=10ms (50 Hz),sine	3200	A²s
	Vr=0 t=8.3ms (60 Hz),sine	3500	A²s
VISOL	RMS Isolation Voltage, Any Terminal To Case, t=1 min	3000	V
TVJ		-40 to +150	°C
TVJM		150	
TSTG		-40 to +125	

**Thermal / Mechanical Characteristics**

	Parameter	Typ.	Max.	Units
R <sub>θJS</sub>	Thermal Resistance, Junction-to- Sink DC	-	0.5	
R <sub>θJC</sub>	Thermal Resistance, Junction-to- Case DC	-	0.4	°C/W
R <sub>θCS</sub>	Thermal Resistance, Case-to- Sink- Module	0.1	-	
	Mouting Torque, Case-to-Heatsink	-	4.0	N.m
	Mouting Torque, Case-to-Terminal 1,2 & 3	-	3.0	
	Weight of Module	180	-	g

**Electrical Characteristics (unless otherwise specified)**

	Parameter	Min.	Typ.	Max.	Units	Conditions
I <sub>R</sub>	Diode Leaking Current	-	-	0.5	mA	T <sub>VJ</sub> =25 °C V <sub>R</sub> =V <sub>RRM</sub>
		-	-	5	mA	T <sub>VJ</sub> =125 °C V <sub>R</sub> =V <sub>RRM</sub>
V <sub>F</sub>	Diode Forward Voltage	-	-	1.33	V	I <sub>F</sub> =80A; T <sub>VJ</sub> =25 °C
V <sub>TO</sub>	For power-loss calculations only	-	-	0.8	V	T <sub>VJ</sub> =125 °C
r <sub>T</sub>		-	-	6.0	mΩ	

**Voltage Ratings**

Voltage Code	V <sub>RRM</sub> (V)	V <sub>RSM</sub> (V)	I <sub>RRM</sub> (mA)	T <sub>J</sub> =25 °C
080	800	900	1.0	
120	1200	1300	1.0	
140	1400	1500	1.0	
160	1600	1700	1.0	

**Case Outline - MDS-pak**

