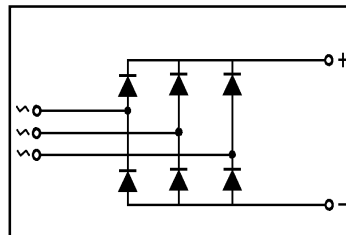


Diode Modules TG-PAK

Features

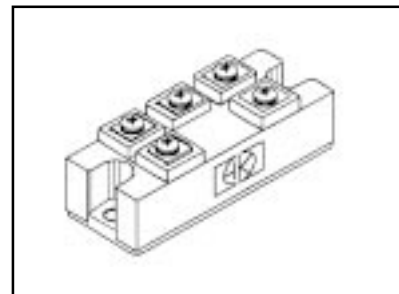
- International standard package
- With DBC ceramic base plate
- Planar passivated chips
- High surge capability
- Complies With RoHS Directive;
- Lead Free;



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 _{θJS}	Thermal Resistance, Junction-to- Sink DC	-	0.5	
R _{θJC}	Thermal Resistance, Junction-to- Case DC	-	0.4	°C/W
R _{θCS}	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 _R	Diode Leaking Current	-	-	0.5	mA	T _{VJ} =25 °C V _R =V _{RRM}
		-	-	5	mA	T _{VJ} =125 °C V _R =V _{RRM}
V _F	Diode Forward Voltage	-	-	1.33	V	I _F =80A; T _{VJ} =25 °C
V _{TO}	For power-loss calculations only	-	-	0.8	V	T _{VJ} =125 °C
r _T		-	-	6.0	mΩ	

Voltage Ratings

Voltage Code	V _{RRM} (V)	V _{RSM} (V)	I _{RRM} (mA)	T _J =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

