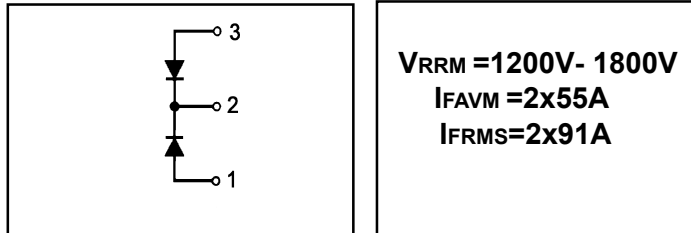


Diode Modules Add -A -PAK

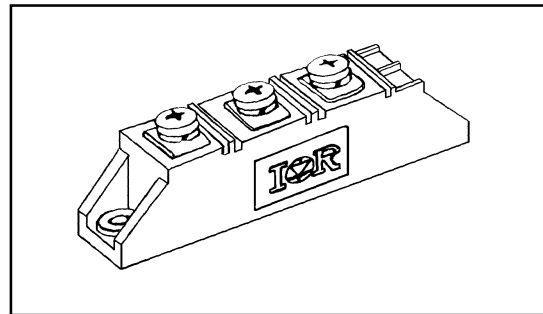
Features

- International standard package
- With DBC ceramic base plate
- Planar passivated chips
- High surge capability
- UL recognition pending



Benefits

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



Absolute Maximum Ratings

Symbol	Test Conditions	Max.	Units
VRRM		1200,1400,1600,1800	V
IFRMS	TVJM=150 °C	91	A
IFAVM	Tc=85 °C;180° sine	55	A
	Tc=100 °C;180° sine	45	A
IFSM	TVJ=45 °C; t=10ms (50 Hz),sine	1050	A
	VR=0 t=8.3ms (60 Hz),sine	1150	A
	TVJ=150 °C; t=10ms (50 Hz),sine	900	A
	VR=0 t=8.3ms (60 Hz),sine	1000	A
I²t	TVJ=45 °C; t=10ms (50 Hz),sine	4800	A²s
	VR=0 t=8.3ms (60 Hz),sine	5300	A²s
	TVJ=150 °C; t=10ms (50 Hz),sine	3500	A²s
	VR=0 t=8.3ms (60 Hz),sine	4000	A²s
VISOL	RMS Isolation Voltage, Any Terminal To Case, t=1 min	2500	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	-	0.435	
R _{θJC}	Thermal Resistance, Junction-to- Case DC	-	0.335	°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	100	-	g

Electrical Characteristics (unless otherwise specified)

	Parameter	Min.	Typ.	Max.	Units	Conditions
I _R	Diode Leaking Current	-	-	1	mA	T _{VJ} =25°C V _R =V _{R_{RM}}
		-	-	10	mA	T _{VJ} =125°C V _R =V _{R_{RM}}
V _F	Diode Forward Voltage	-	-	1.40	V	I _F =85A; T _{VJ} =25°C
V _{TO}	For power-loss calculations only	-	-	0.8	V	T _{VJ} =125°C
r _T		-	-	4.9	mΩ	
Q _S				90	μC	T _{VJ} =125°C; I _F =50A,
I _{RM}				11	A	-di/dt=0.6A/μs

Voltage Ratings

Voltage Code	V _{RRM} (V)	V _{RSM} (V)	I _{RRM} T _J =25°C(mA)
120	1200	1300	1.0
140	1400	1500	1.0
160	1600	1700	1.0
180	1800	1900	1.0

Case Outline - a-a-pak

