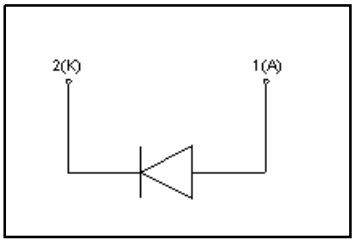
XI'AN IR-PERI Company

PRELIMINARY MDD600DG240

Rectifier Diode Module

Features

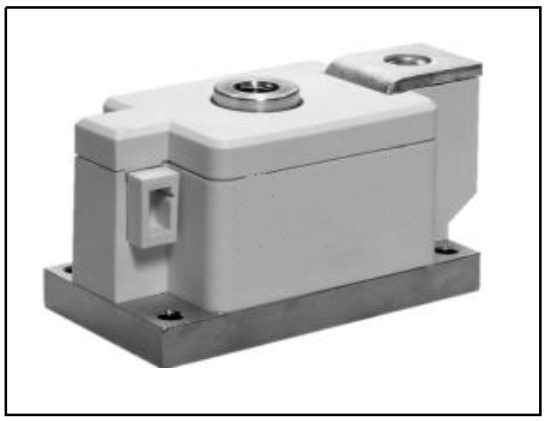
- International standard package
  With ALN ceramic internal insulation
- High surge capability



V_{RRM} =1200~2400v
I_{FAVM}=2x600A
I_{FRMS}=2X940A

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
V_{RRM}		2400	V
I_{FRMS}	T_{VJM}=150 °	940	A
I_{FAVM}	T_C =80°C;180° Sine	600	A
	T_C=100 °C;180° Sine	540	A
I_{FSM}	T_{VJ}=45 °C; t=10ms (50 Hz),sine	16800	A
	T_{VJ}=150 °C; t=10ms (50 Hz),sine	14200	A
I^2t	T_{VJ}=45 °C; t=10ms (50 Hz),sine	1180000	A^2s
	T_{VJ}=150 °C; t=10ms (50 Hz),sine	968000	A^2s
V_{ISOL}	RMS Isolation Voltage, Any Terminal To Case, t=1 min	3000	V
T_{VJ}		-40 to +150	°C
T_{VJM}		150	
T_{STG}		-40 to +150	

Thermal/Mechanical Characteristics

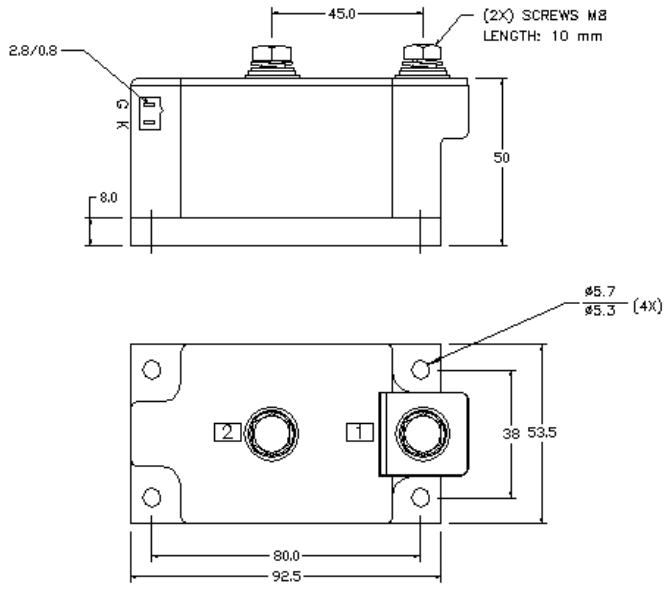
	Parameter	Typ.	Max.	Units
$R_{\theta JC}$	thermal resistance , junction to case/per Module		0.0460	° C/W
		-		
			-	
	Mouting Torque, Case-to-Heatsink	-	4.0	N.m
	Mouting Torque, Case-to-Terminal 1,2 & 3	-	3.0	
	Weight of Module	-	1450	g

Electrical Characteristics (unless otherwise specified)

	Parameter	Min.	Typ.	Max.	Units	Conditions
I_R	Diode Leaking Current	-	-	5	mA	T_{VJ}=25°C V_R=V_{RRM}
		-	-	60	mA	T_{VJ}=150°C V_R=V_{RRM}
V_F	Diode Forward Voltage	-	-	1.50	V	I_F=1800 T_{VJ}=150° C
V_{TO}	For power-loss calculations only	-	-	0.8	V	
r_T		-	-	0.32	mΩ	T_{VJ}=150 °C

Case Outline-DG

All dimensions in millimeters (inches)



Dimensions are shown in millimeters