XI'AN IR-PERI
Company

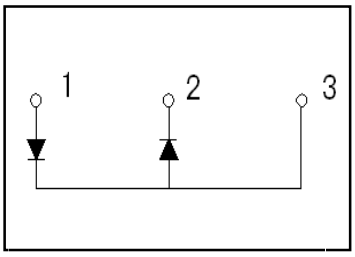
PRELIMINARY

Rectifier Diode Module

MDC300TG160

Features

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



V_{RRM} =1600V- 1800V

I_{FAVM}=2x300A
I_{FRMS}=2X471A

Benefits

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

Voltage Ratings

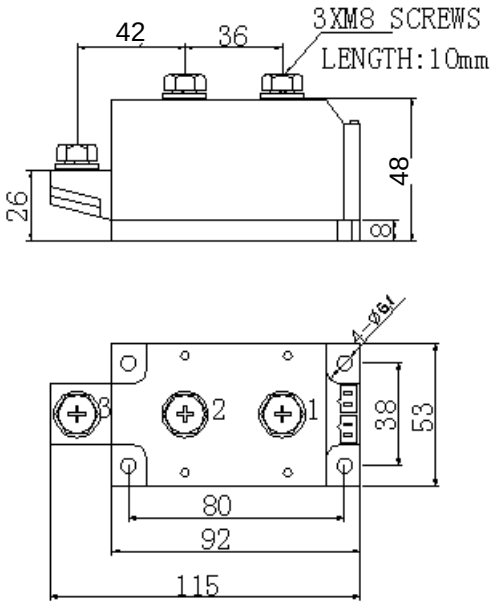
Voltage Code	V_{RRM}(V)	V_{RSM} (V)	I_{RRM} T_j =25°C(mA)
16	1600	1700	3
18	1800	1900	3

Absolute Maximum Ratings

Symbol	Test Conditions	Max.	Units
I_{FRMS}	T_{VJM}=150°	471	A
I_{FAVM}	T_C=70°C;180° sine	300	A
I_{FSM}	T_j=25°C; t=10ms (50 Hz),sine	10	KA
	V_R=0 t=8.3ms (60 Hz),sine	12	KA
	T_j=125°C; t=10ms (50 Hz),sine	7	KA
	V_R=0 t=8.3ms (60 Hz),sine	9	KA
I^2t	T_j=45°C; t=10ms (50 Hz),sine	583	$A^2s \times 10^3$
	V_R=0 t=8.3ms (60 Hz),sine	720	$A^2s \times 10^3$
	T_j=125°C; t=10ms (50 Hz),sine	450	$A^2s \times 10^3$
	V_R=0 t=8.3ms (60 Hz),sine	405	$A^2s \times 10^3$
V_{ISOL}	RMS Isolation Voltage, Any Terminal To Case, t=1 min	2500	V
T_{vjm}		150	°C
T_{STG}		-40....125	°C

	Test Conditions	Min.	Typ.	Max.	Units
I_{RRM}	$T_j = T_{jm}$; $V_R = V_{RRM}$	-	-	30	mA
V_F	I_F=900A; T_j=25℃	-	-	1.5	V
V_{FO}	For power-loss calculations only(T_j=150℃)	-	-	0.78	V
r_F		-	-	0.72	mΩ
$R_{th(J-C)}$	Junction to case	-	-	0.12	℃/W
M_d	Mounting Torque, Case-to-Heatsink	-	-	30	kgf.cm
	Mounting Torque, Case-to-Terminal 1,2 & 3	-	-	45	kgf.cm
W	Weight of Module	-	865	-	g

Case Outline - TG1



Dimensions are shown in millimeters