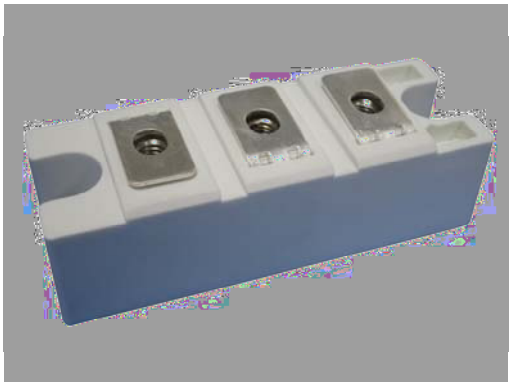
MF200A12F2

RoHS COMPLIANT



Maximum Ratings

Symbol	Conditions	Values	Units
V_R		1200	V
V_{RRM}		1200	V
$I_{F(AV)}$	T_C=110°C, Per Diode	200	A
$I_{F(RMS)}$	T_C=110°C, Per Diode	280	A
I_{FSM}	1/2 Cycle , 50Hz, Sine	1800	A
	1/2 Cycle , 60Hz, Sine	1975	A
I^2t	T_J=45°C, t=10ms, 50Hz, Sine	16200	A^2s
	T_J=45°C, t=8.3ms, 60Hz, Sine		
P_D		568	W
Visol	AC, Ton=1min	3000	V
T_J		-40 to +150	°C
T_{STG}		-40 to +125	°C
Torque	Recommended M6	4.5	N·m
Torque	Recommended M6	4.5	N·m
Weight		160	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Junction-to-Case	0.22	/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
I_{RM}	V_R=1200V	--	--	1	mA
	V_R=1200V, T_J=125°C	--	--	5	mA
V_F	I_F=200A	--	2.3		V
	I_F=200A, T_J=125°C	--	1.9		V
trr	I_F=1A, V_R=30V, di_F/dt=-200A/μs	--	57	--	ns
trr	V_R=600V, I_F=200A, di_F/dt=-200A/μs, T_J=25°C	--	110	--	ns
I_{RRM}		--	9	--	A
trr	V_R=600V, I_F=200A, di_F/dt=-200A/μs, T_J=125°C	--	500	--	ns
I_{RRM}		--	21	--	A

Performance Curves

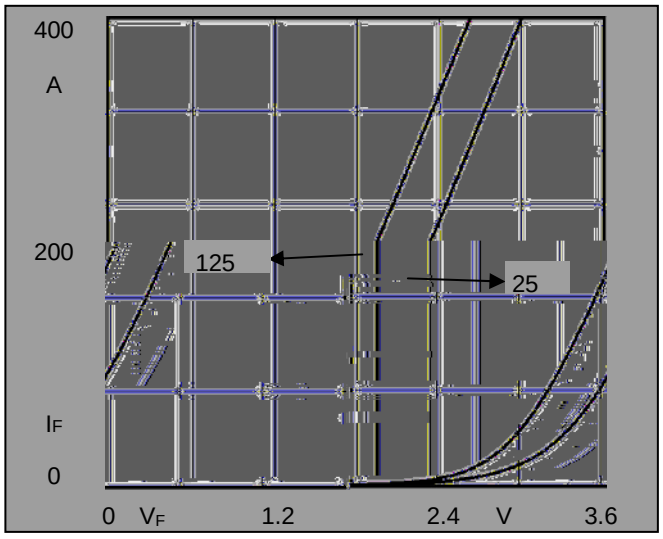


Fig1. Forward Voltage Drop vs Forward Current

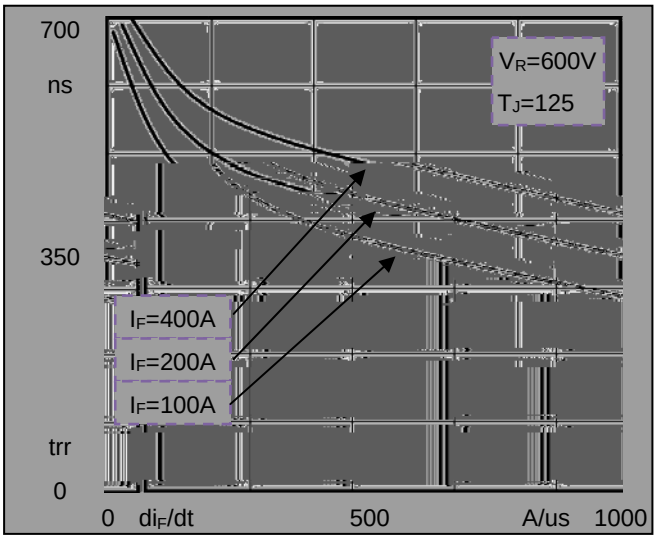


Fig2. Reverse Recovery Time vs di_F/dt

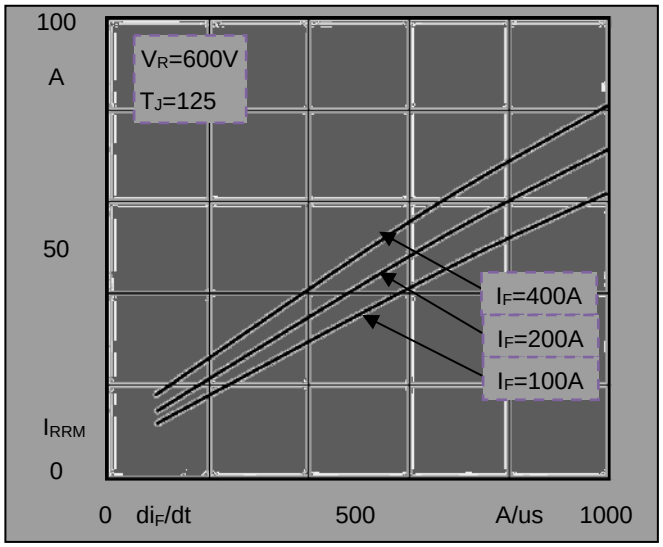


Fig3. Reverse Recovery Current vs di_F/dt

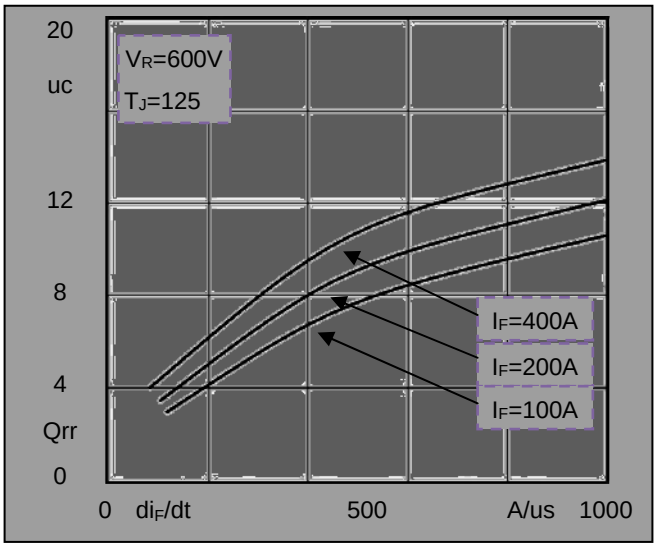
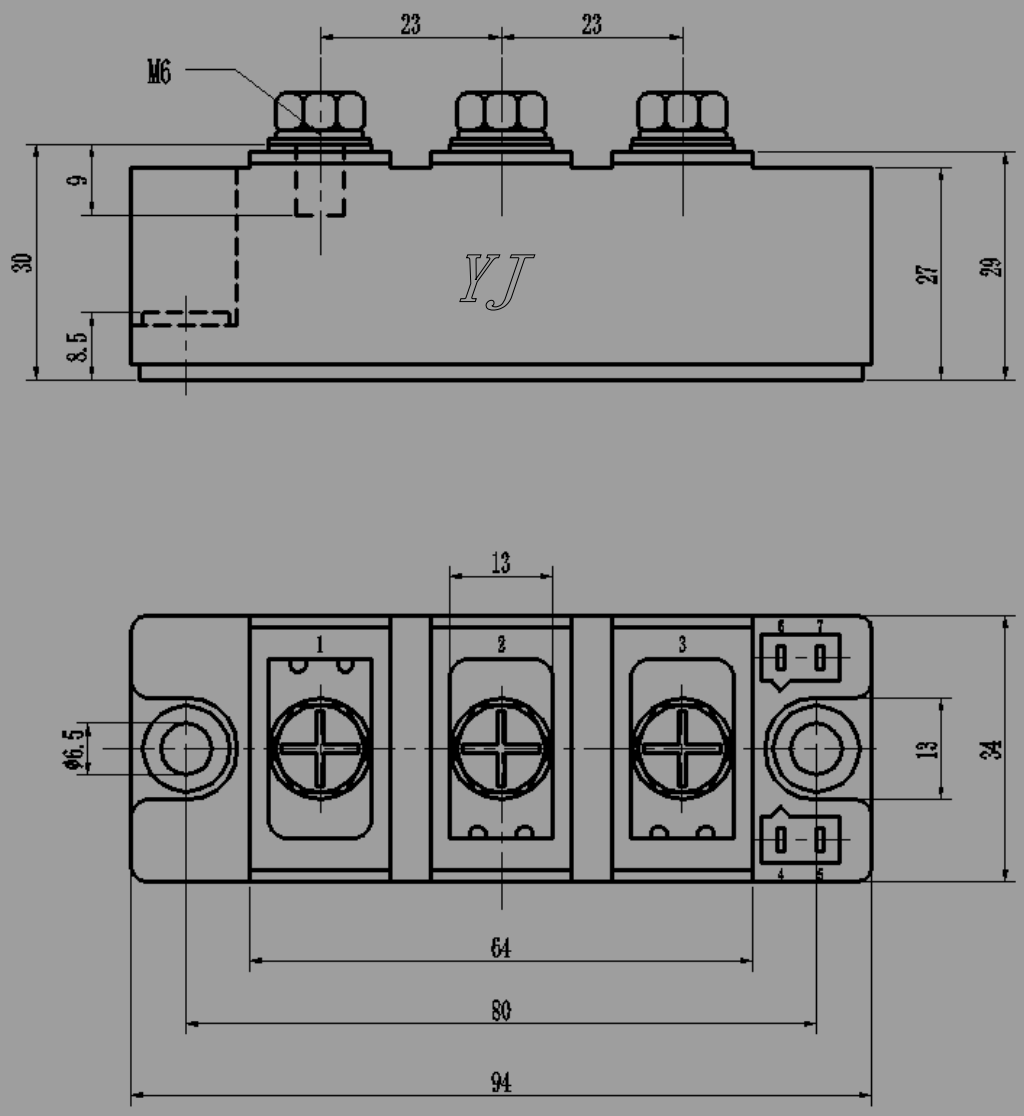


Fig4. Reverse Recovery Charge vs di_F/dt

Package Outline Information

CASE: F2



Dimensions in mm