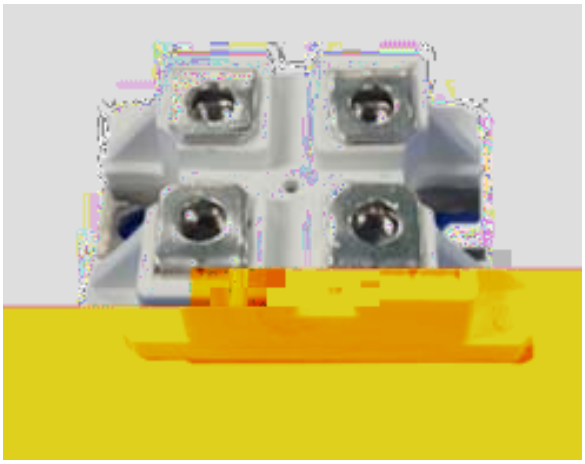
MF200DU06FJ

RoHS COMPLIANT



FRED Modules

V_{RRM} 600V
I_{FAV} 2 h 100 A

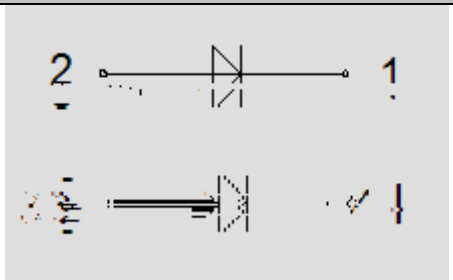
Applications

- Inversion Welder
- Uninterruptible Power Supply (UPS)
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Power Factor Correction (PFC) Circuit
- Converter & Chopper

Features

- Soft Reverse Recovery Characteristics
- Ultrafast Reverse Recovery Time
- Low Reverse Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Popular SOT-227 Package

Circuit



Maximum Ratings

Symbol	Conditions	Values	Units
V_R		600	V
V_{RRM}		600	V
$I_{F(AV)}$	T_C=90°C, Per Leg	100	A
	T_C=90°C, Per Module	200	A
$I_{F(RMS)}$	T_C=90°C, Per Leg	150	A
I_{FSM}	1/2 Cycle , 50Hz, Sine	1300	A
	1/2 Cycle , 60Hz, Sine	1500	A
I^2t	T_J=45°C, t=10ms, 50Hz, Sine	8450	A^2s
P_D	Tc=25°C	260	W
T_J		-40 to +150	°C
T_{STG}		-40 to +125	°C
Visol	3600V AC 1s	1	mA
Torque	To Sink RecommendedHM4H	0.6~1.2	N·m
Torque	To Terminal RecommendedHM4H	0.6~1	N·m
Weight		27	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per diode	0.3	/W

Electrical Characteristics

Performance Curves

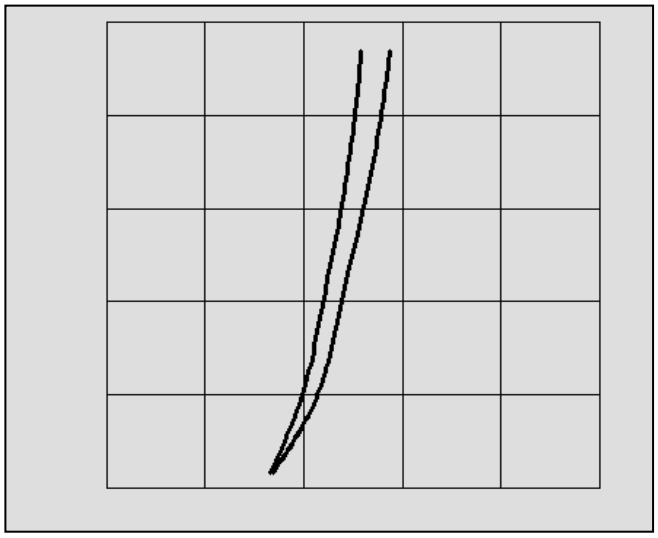


Fig1. Forward Voltage Drop vs Forward Current

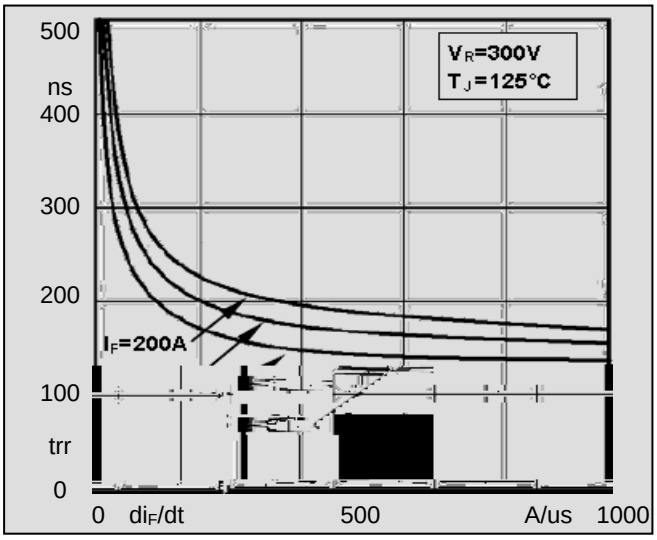


Fig2. Reverse Recovery Time vs di_F/dt

Fig3. Reverse Recovery Current vs di_F/dt

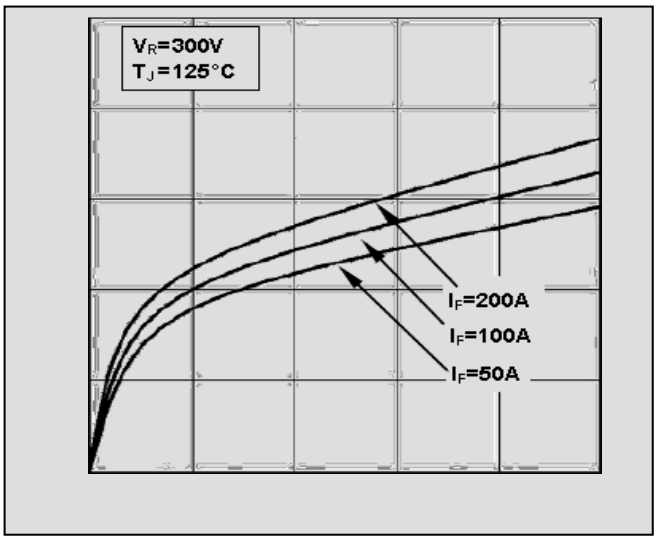


Fig4. Reverse Recovery Charge vs di_F/dt

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