



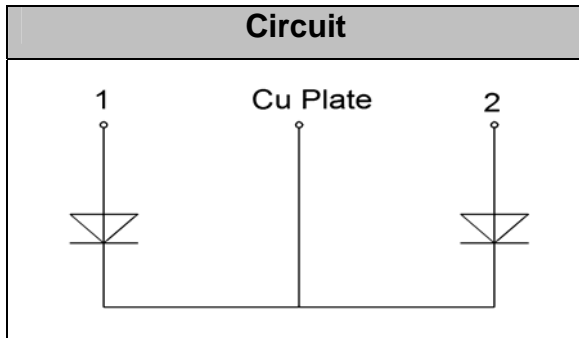
## FRED Modules

**V<sub>RRM</sub>** 400V

**I<sub>FAV</sub>** 400 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
- Low Inductance Package

## Maximum Ratings

Symbol	Conditions	Values	Units
V <sub>R</sub>		400	V
V <sub>RRM</sub>		400	V
I <sub>F(AV)</sub>	T <sub>C</sub> =125°C, Per Diode	200	A
	T <sub>C</sub> =125°C, Per Module	400	A
I <sub>F(RMS)</sub>	T <sub>C</sub> =125°C, Per Diode	285	A
I <sub>FSM</sub>	1/2 Cycle, 50Hz, Sine	6000	A
	1/2 Cycle, 60Hz, Sine	6580	A
I <sup>2</sup> t	T <sub>J</sub> =45°C, t=10ms, 50Hz, Sine	180000	A <sup>2</sup> s
P <sub>D</sub>		2000	W
T <sub>J</sub>		-40 to +150	°C
T <sub>STG</sub>		-40 to +125	°C
Torque	Recommended (M6)	3~4.7	N·m
Torque	Recommended (M6)	3~4.7	N·m
Weight		92	g

## Thermal Characteristics

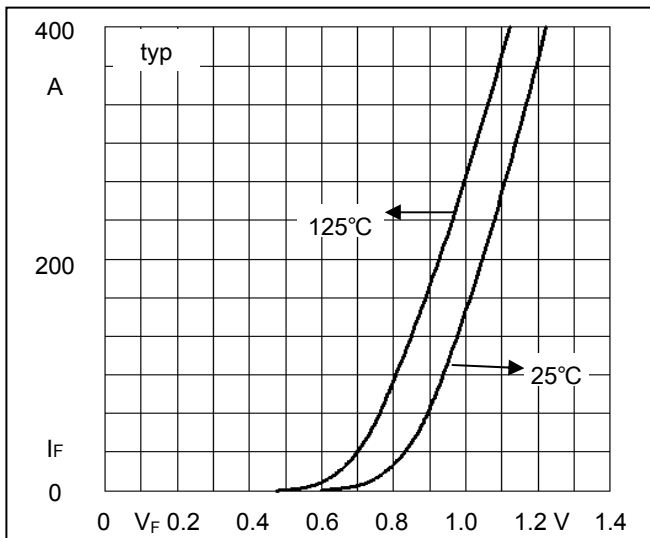
Symbol	Conditions	Values	Units
R <sub>th(j-c)</sub>	Per Module	0.06	°C/W



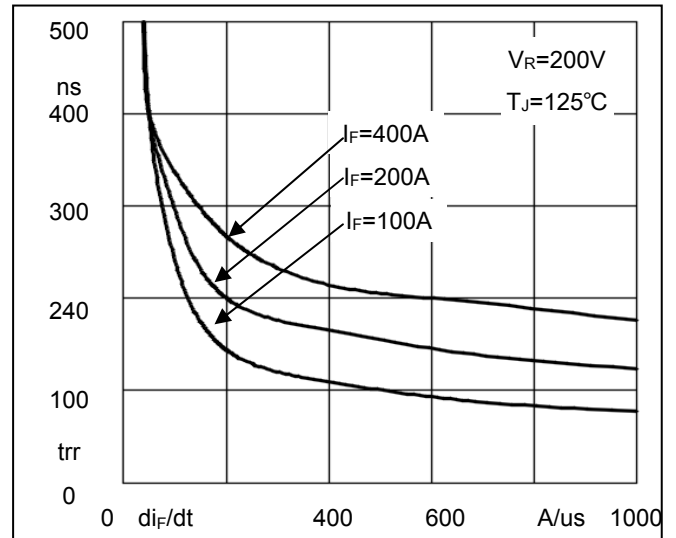
## Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
$I_{RM}$	$V_R=400V$	--	--	1	mA
	$V_R=400V, T_J=125^\circ C$	--	--	2	mA
$V_F$	$I_F=200A$	--	1.1	1.2	V
	$I_F=200A, T_J=125^\circ C$	--	0.92	1	V
$t_{rr}$	$I_F=1A, V_R=30V, di_F/dt=-200A/\mu s$	--	80	--	ns
$t_{rr}$	$V_R=200V, I_F=200A, di_F/dt=-200A/\mu s, T_J=25^\circ C$	--	140	--	ns
$I_{RRM}$		--	16	--	A
$t_{rr}$	$V_R=200V, I_F=200A, di_F/dt=-200A/\mu s, T_J=125^\circ C$	--	240	--	ns
$I_{RRM}$		--	30	--	A

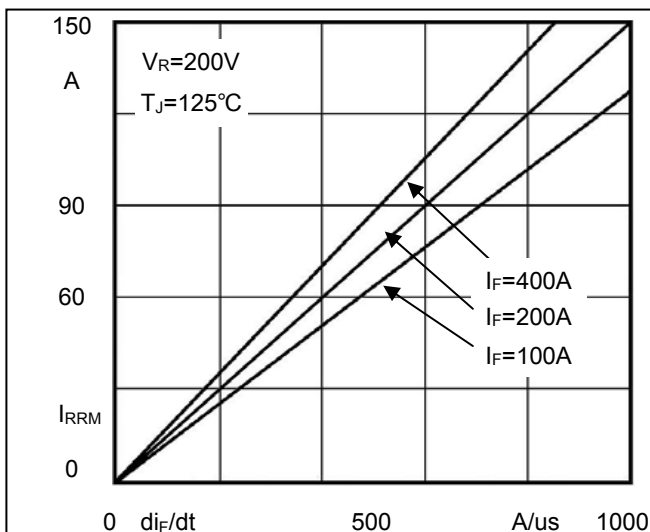
## Performance Curves



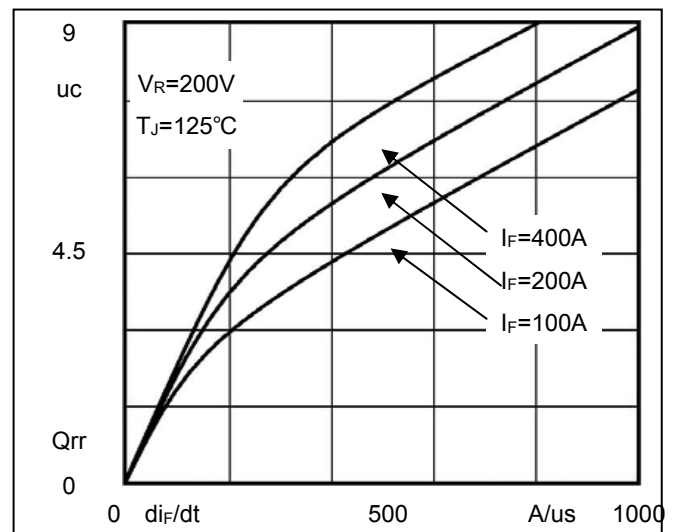
**Fig1. Forward Voltage Drop vs Forward Current**



**Fig2. Reverse Recovery Time vs  $di_F/dt$**



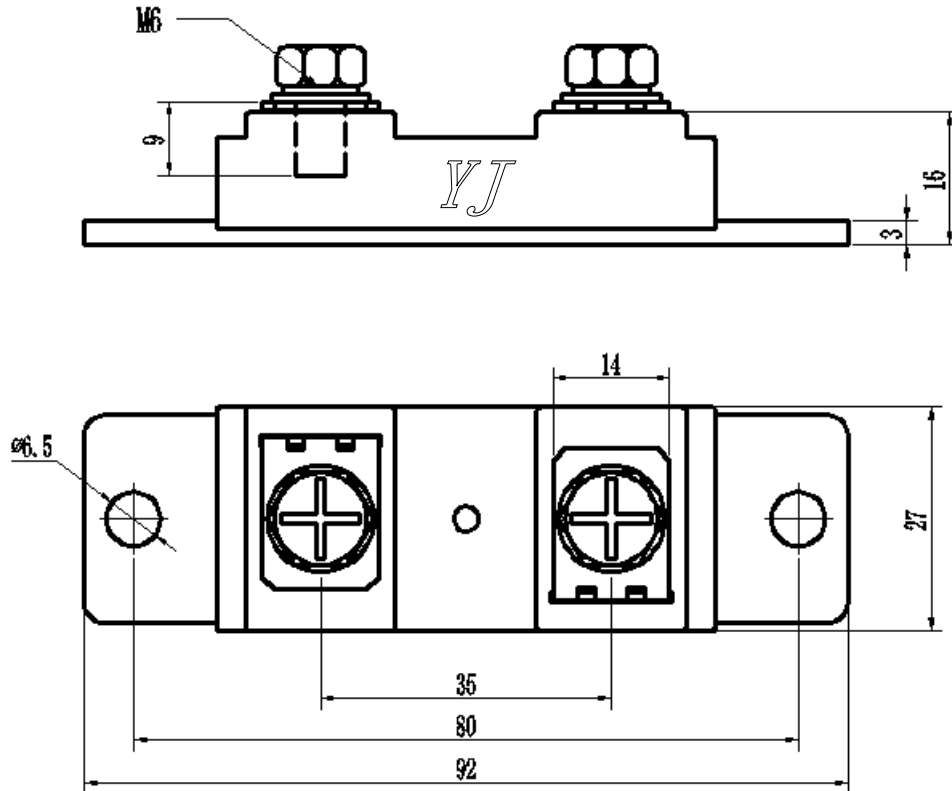
**Fig3. Reverse Recovery Current vs  $di_F/dt$**



**Fig4. Reverse Recovery Charge vs  $di_F/dt$**

## Package Outline Information

CASE: F3



Dimensions in mm

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for yangjie manufacturer:*

Other Similar products are found below :

[BR25005](#) [BR2501](#) [BR2506](#) [BZV55C12](#) [BZX55C10](#) [BZX55C4V7](#) [BR2504L](#) [MD200K16D2-A1-0000](#) [MD200S12M3-A1-0000](#)  
[MD200A16D2-A1-0000](#) [MF200DU04FJ-A2-0000](#) [MD165U16D2-A1-0000](#) [MD100S12M4-A1-0000](#) [KBPC3506](#) [MF150C06F5](#)  
[MD165C16D2](#) [MD100S16M5-A1-0000](#) [MD200S18M3-A1-0000](#) [MD100S12M3-A1-0000](#) [MD130S12M5-A1-0000](#) [MD75S18M4-A1-0000](#)  
[MD100S08M3-A1-0000](#) [MD250S12NM3-A1-0000](#) [MD250S16NM3-A1-0000](#) [MT100DT08L1-A1-0000](#) [MT100DT18L1-A1-0000](#)  
[MD100S08M5-A1-0000](#) [MT75DT08L1-A1-0000](#) [MD130S16M3-A1-0000](#) [MD160S18M5-A1-0000](#) [MD160S08M3-A1-0000](#) [MD160S08M5-](#)  
[A1-0000](#) [MD50S16M4-A1-0000](#) [MD100S18M4-A1-0000](#) [MD250S18M3-A1-0000](#) [MT160C18T2-A1-0000](#) [MD100S16M3-A1-0000](#)  
[MT75DT16L1-A1-0000](#) [MD100S12M5-A1-0000](#) [MD100S16NM3-A1-0000](#) [MD100S18M8-A1-0000](#) [MT100DT12L1-A1-0000](#)  
[MT75DT18L1-A1-0000](#) [MD100S18M3-A1-0000](#) [MD100S18M5-A1-0000](#) [MD130S16M5-A1-0000](#) [MD160S16NM3-A1-0000](#)  
[MD160S18NM3-A1-0000](#) [MD130S08M3-A1-0000](#) [MD100S08M2-A1-0000](#)