



## FRED Modules

**V<sub>RRM</sub>** 600V  
**I<sub>FAV</sub>** 400 A

**Applications**  
Inversion Welder  
400A

### Maximum Ratings

Symbol	Conditions	Values	Units
V <sub>R</sub>		600	V
V <sub>RRM</sub>		600	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	295	A
I <sub>FSM</sub>	1/2 Cycle , 50Hz, Sine	3500	A
	1/2 Cycle , 60Hz, Sine	4000	A
I <sup>2</sup> t	T <sub>J</sub> =45°C, t=10ms, 50Hz, Sine	61250	A <sup>2</sup> s
	T <sub>J</sub> =45°C, t=8.3ms, 60Hz, Sine	80000	A <sup>2</sup> s
P <sub>D</sub>		2080	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 diode	0.06	/W



**MF400K06F3**

