

FRED Modules

V_{RRM} 600V
I_{FAV} 100 A h₂

Applications

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

Features

- y Soft Reverse Recovery Characteristics
- y Ultrafast Reverse Recovery Time
- y Low Reverse Recovery Loss
- y Low Forward Voltage
- y High Surge Current Capability
- y Low Inductance Package
- y Insulation Encapsulation

Maximum Ratings

Symbol	Conditions	Values	Units
V _R		600	V
V _{RRM}		600	V
I _{F(AV)}	T _C =100°C, Per Diode	100	A
	T _C =100°C, Per Module	200	A
I _{F(RMS)}	T _C =100°C, Per Diode	150	A
I _{FSM}	1/2 Cycle , 50Hz, Sine	1300	A
	1/2 Cycle , 60Hz, Sine	1426	A
I ² t	T _J =45°C, t=10ms, 50Hz, Sine	8450	A ² s
	T _J =45°C, t=8.3ms, 60Hz, Sine		A ² s
P _D		280	W
Visol	AC, Ton=1min	3000	V
T _J		-40 to +150	°C
T _{STG}		-40 to +125	°C
Torque	RecommendedHM5H	3±15%	N·m
Torque	RecommendedHM6H	4.5±15%	N·m
Weight		160	g

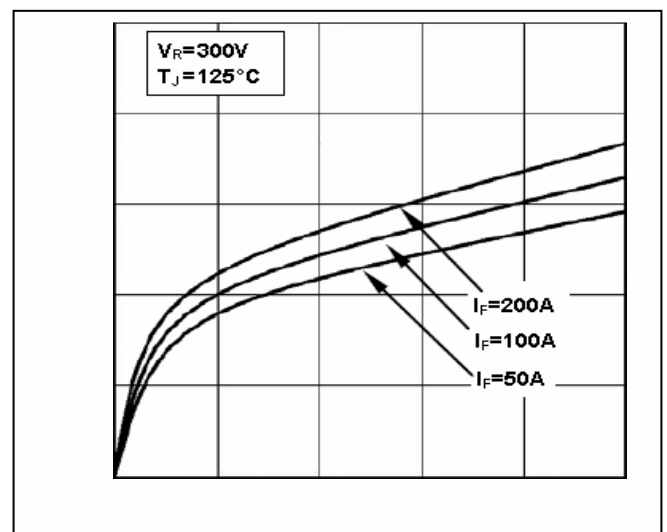
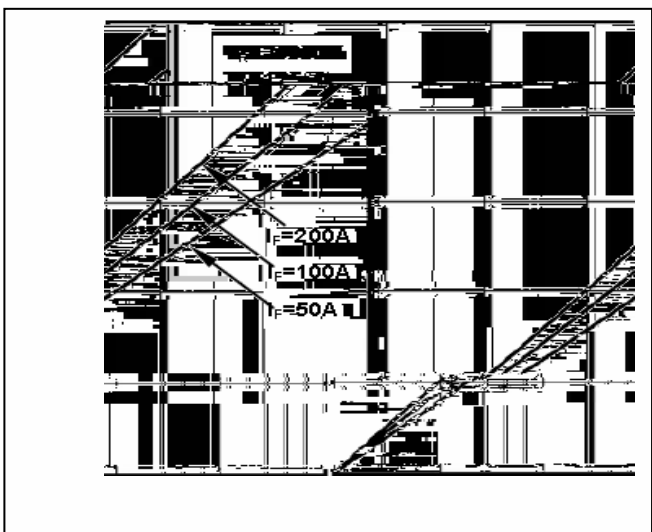
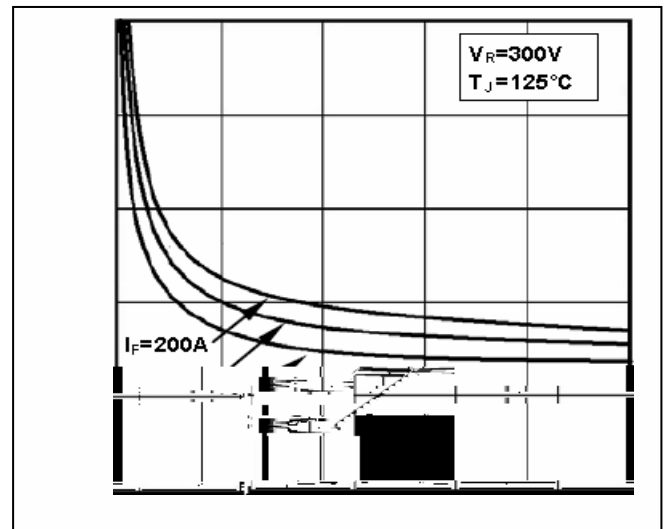
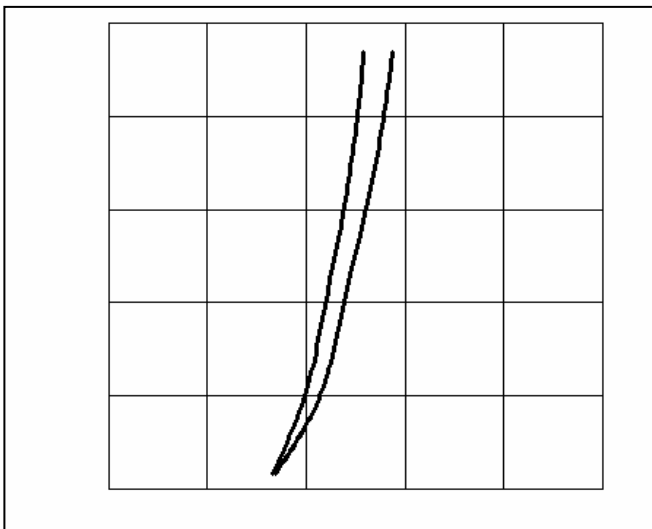
Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Junction-to-Case, Per Diode	0.32	/W
R _{th(j-c)}	Junction-to-Case, Per Module	0.16	/W

Electrical Characteristics

Symbol	Conditions	Values
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Performance Curves



Package Outline Information

CASE: F5

Dimensions in mm