



MB600K01F3

Schottky Rectifier Modules

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

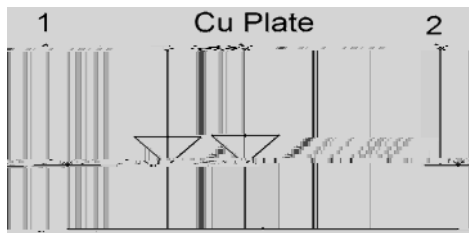
Applications

- y Plating Power Supply
- y High Frequency Power Supply
- y High Current Switching Power Supply
- y Reverse Battery Protection
- y Welding Matching

Features

- y Center Tap Module
- y High Frequency Operation
- y Low Forward Voltage
- y Dual Diode Construction; May be Paralleled for High Current Output
- y Lead (Pb)-free
- y Designed and qualified for industrial level

Circuit



			Units
V _R		100	V
I _{F(AV)}	T _C =125°C, Per Leg	300	A
	T _C =125°C, Per Module	600	A
I _{FSM}	1/2 Cycle , 60Hz, Sine	4000	A
I ² t	T _J =45°C, t=8.3ms, 60Hz, Sine	80000	A ² s
T _J		-40 to +150	°C
T _{STG}		-40 to +150	°C
Torque	Recommended M6	4.5	N·m
Torque	Recommended M6	4.5	N·m
Weight		95	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.28	/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
I _{RM}	V _R =100V	--	--	1	mA
	V _R =100V, T _J =125°C	--	--	50	mA
V _F	I _F =300A, , T _J =25°C	--	0.84	0.86	V
	I _F =300A, , T _J =125°C	--	0.74	0.78	



Performance Curves

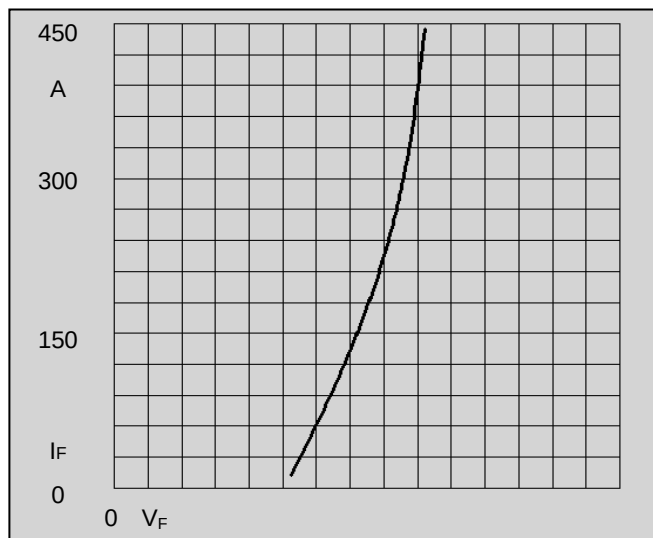


Fig1. Forward Voltage Drop vs Forward Current

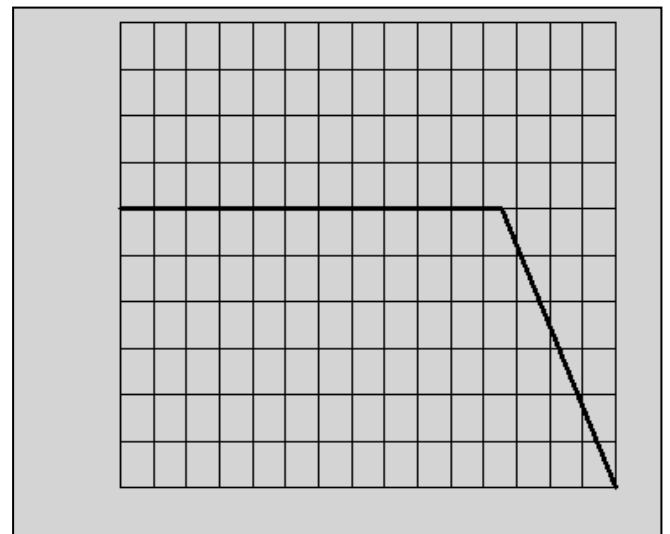


Fig2. Forward Current Derating Curve

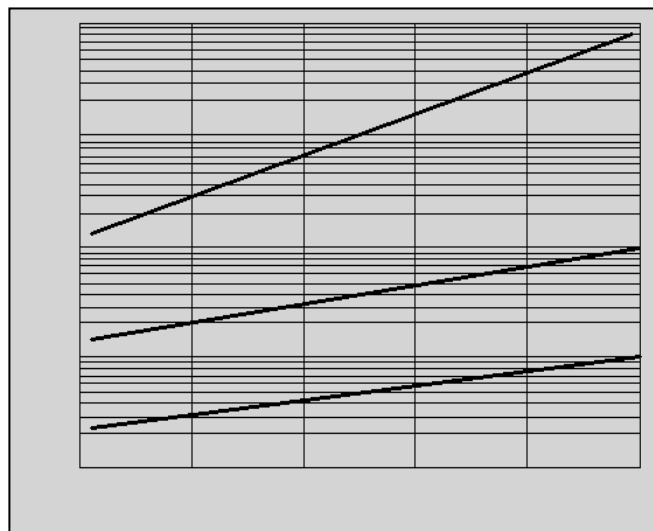
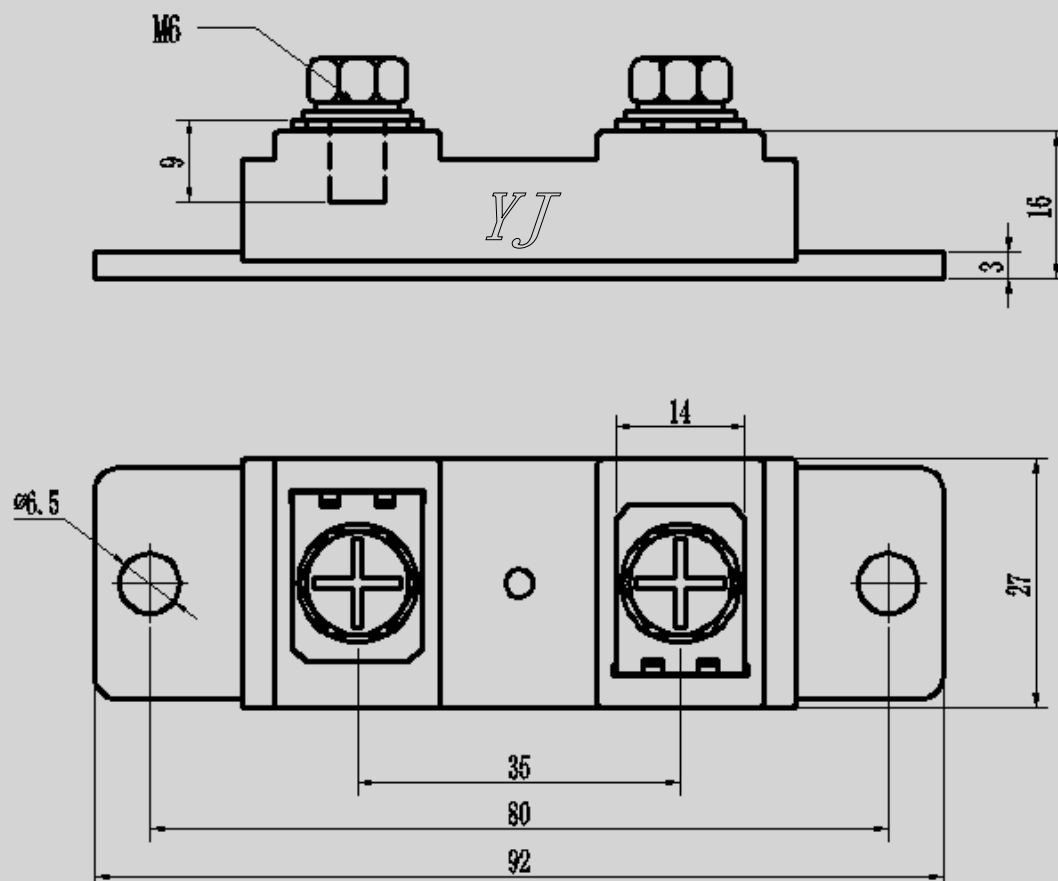


Fig3. Typical Reverse Current



Package Outline Information

CASE: F3



Dimensions in mm