STARSEA

MB200DU01FJ

RoHS COMPLIANT



Schottky Rectifier Modules

V_{RRM} 100V
I_{FAV} 2*100 A

Applications

- Inversion Welder
- Plating Power Supply
- Gemeral Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper

Features

- Low Reverse Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Popular SOT-227 Package

Maximum Ratings

Symbol	Conditions	Values	Units
V_R		100	V
I_{FAV}	T_C=120°C, Per Leg	100	A
	T_C=120°C, Per Module	200	A
I_{FSM}	t=10ms T_J=25℃	1300	A
I^2t	t=10ms T_J=25℃	8450	A^2s
V_{ISO}	AC 50Hz/60Hz; R.M.S; 1min	3000	V
T_J		-40 to +150	℃
Tstg		-40 to +125	℃
V_{ISO}	AC 50Hz/60Hz; R.M.S; 1min	3000	V
Mt	To Terminals(M4)	1±15%	N·m
Ms	To Heatsink(M4)	1±15%	N·m
Weight		27	g
Symbol	**Conditions**	**Values**	**Units**
Rth(j-c)	Junction to Case(Per Leg)	0.5	℃/W

Thermal Characteristics

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
I_{RM}	V_R=V_{RRM}	--	--	1	mA
	V_R=V_{RRM}, T_J=125°C	--	--	20	mA
VF	I_F=100A	--	--	1.0	V
	I_F=100A, T_J=125°C	--	--	0.9	V
r_F	T_J=125℃		2.7		mΩ
VF0			0.6		V

Performance Curves

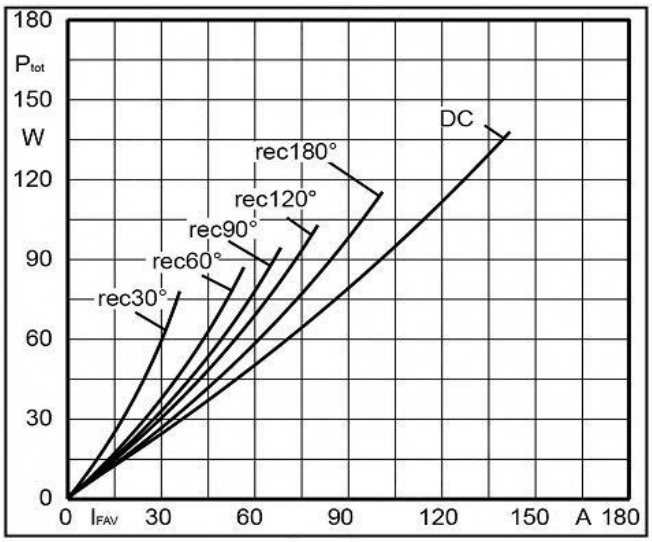


Fig1. Power dissipation

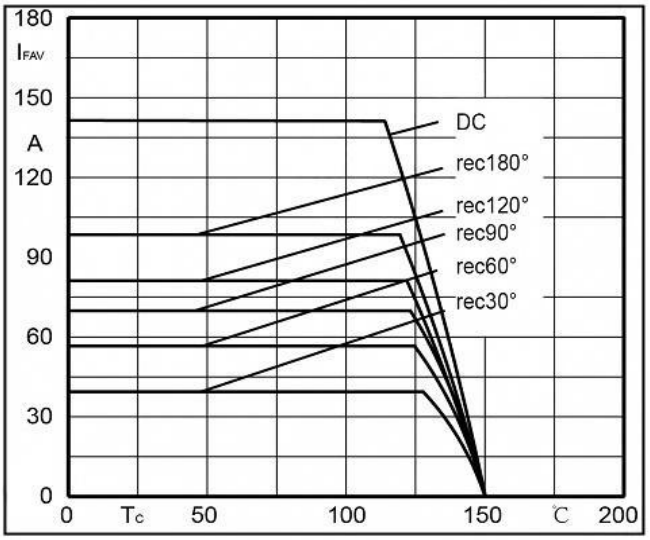


Fig2.Forward Current Derating Curve

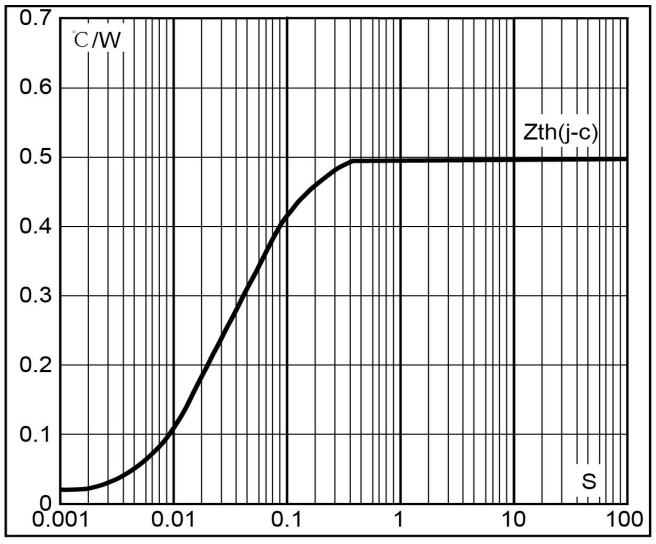


Fig3. Transient thermal impedance

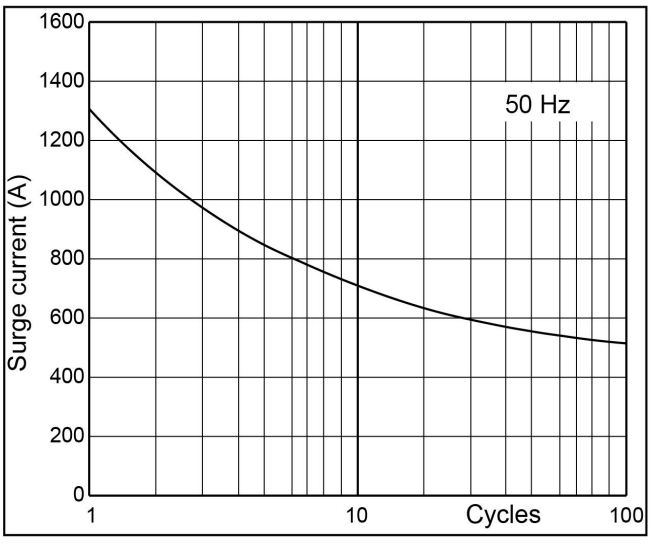


Fig4. Max Non-Repetitive Forward Surge Current

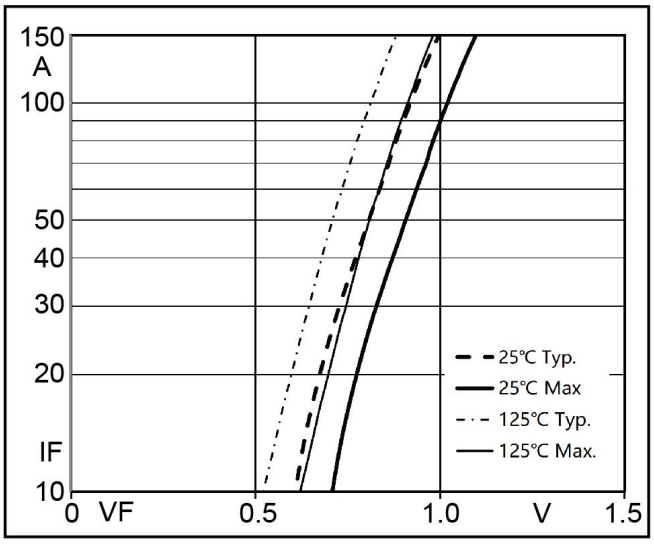
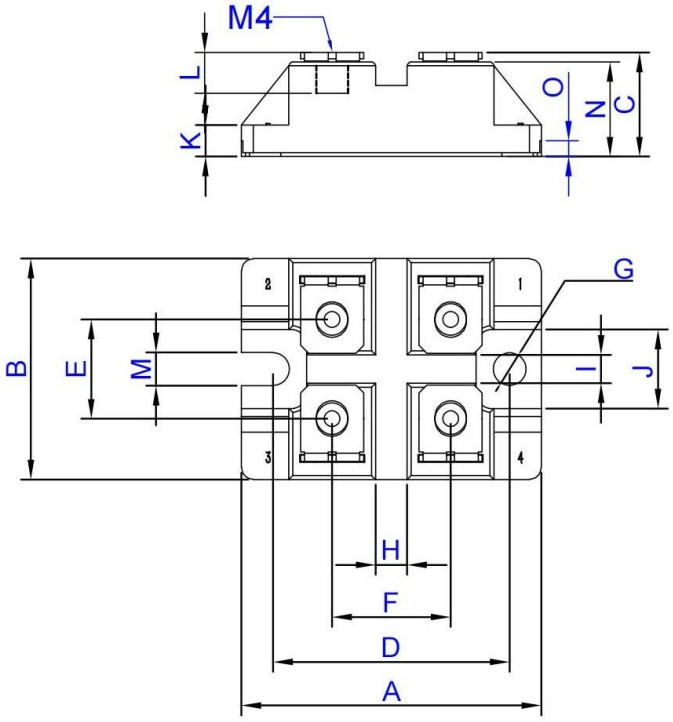


Fig5. Forward Characteristics

Package Outline Information

CASE: FJ



DIM	Min (mm)	Max (mm)	Note
A	37.5	38.5	
B	27.5	28.5	
C	12.8	13.5	
D	29.5	30.5	
E	12.1	13.1	
F	14.5	15.5	
G	4.0	4.4	Ø
H	3.7	4.3	
I	3.3	3.9	
J	9.5	10.5	
K	3.7	4.3	
L	5.0	5.5	
M	4.0	4.4	
N	11.7	12.3	
O	1.8	2.2	

Packing Standard

Item	Length: A(mm)	Width: B(mm)	Height: C (mm)	Quantity (PCS)
Inner Box	290	252	40	25
Outer Carton	300	270	280	150

Notice

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