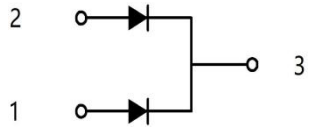
Schottky Diode Module

Symbol	Value	Unit
V_R	200	V
I_{FAV}	400	A



Features

- Low Forward Voltage
- High Surge Current Capability
- Low Inductance Package

Applications

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

Maximum Ratings

Symbol	Item	Conditions	Values	Unit
V_R	Maximum D.C. Reverse Voltage	-	200	V
V_{RRM}	Maximum Repetitive Reverse Voltage	-		
I_{FAV}	Average Forward Current	Rectangular, d=0.5, T_C=102℃, Per Leg	200	A
		Rectangular, d=0.5, T_C=102℃, Per Module	400	
I_{FSM}	Non-Repetitive Peak Surge Current	t=50Hz(10ms), V_R=0V, Per Leg, T_j= 25℃	3300	A
I^2t	Circuit Fusing Consideration	t=10ms, T_j=25℃	54450	A^2s
T_j	Operating Junction Temperature	-	-40 to +150	℃
T_{stg}	Storage Temperature	-	-40 to +125	℃
M_t	Mounting Torque	To Terminals(M6)	5±15%	N·m
M_s		To Heatsink(M6)	5±15%	
Weight	Module (Approximately)	-	85	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Unit
$R_{th(j-c)}$	Thermal Impedance, Max	Junction to Case(Per Leg)	0.2	℃/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Unit
			Min.	Typ.	Max.	
V_{FM}	Forward Voltage Drop Per Leg, Max	T_j=25℃, I_F=200A	-	-	0.95	V
I_{RRM}	Repetitive Peak Reverse Current Per Leg, Max	T_j=25℃, V_R=V_{RRM}	-	-	0.2	mA
		T_j=150℃, V_R=V_{RRM}	-	-	40	
V_{T0}	Threshold Voltage, for power loss calculation only	T_j=125℃		0.5		V
r_T	Slope Resistance, for power loss calculation only	T_j=125℃		1.75		mΩ

Characteristics Diagram

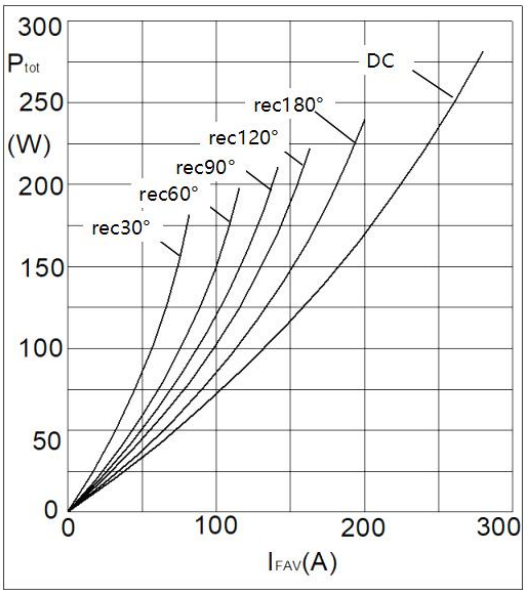


Fig1. Power Dissipation

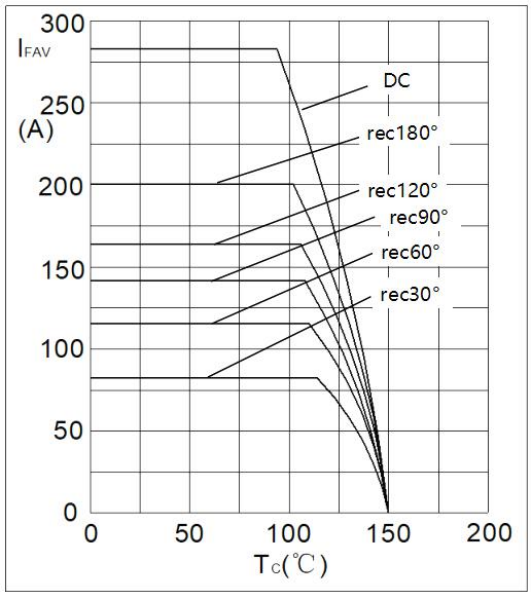


Fig2. Forward Current Derating Curve

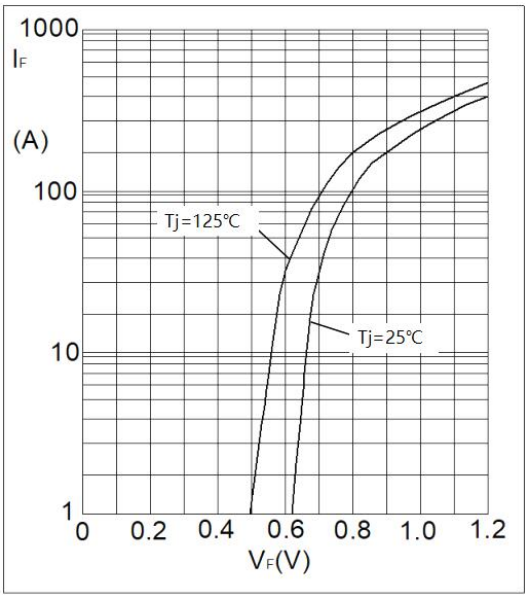


Fig3. Forward Characteristics

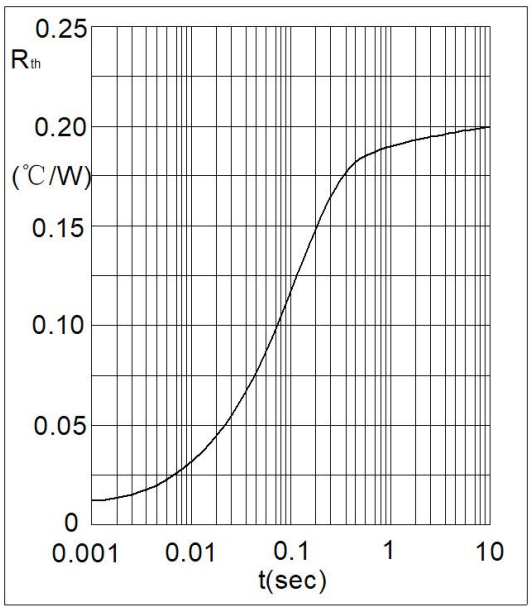


Fig4. Transient Thermal Impedance

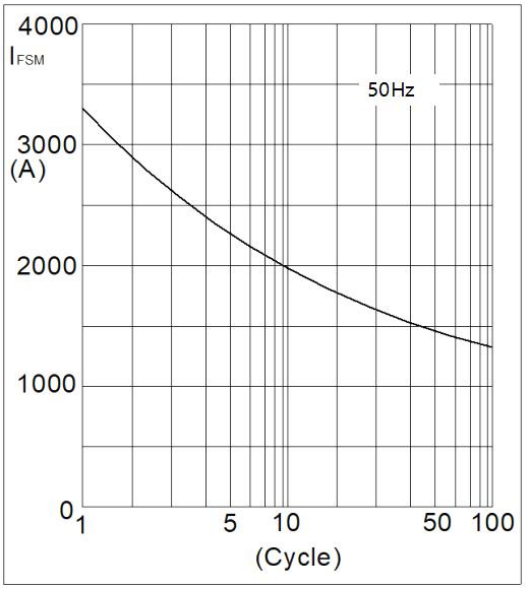


Fig5. Max Non-Repetitive Forward Surge Current

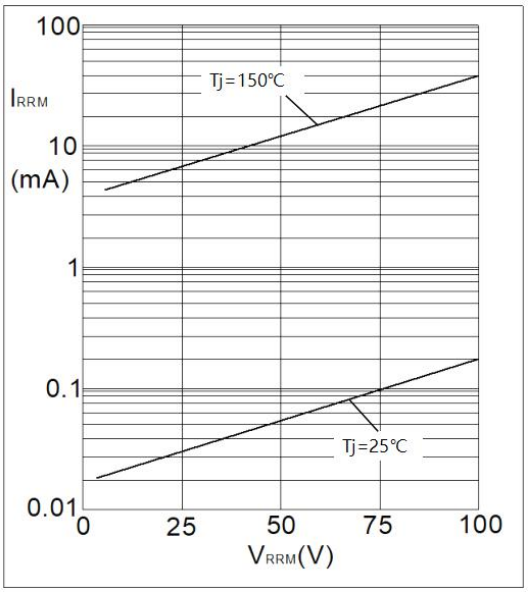
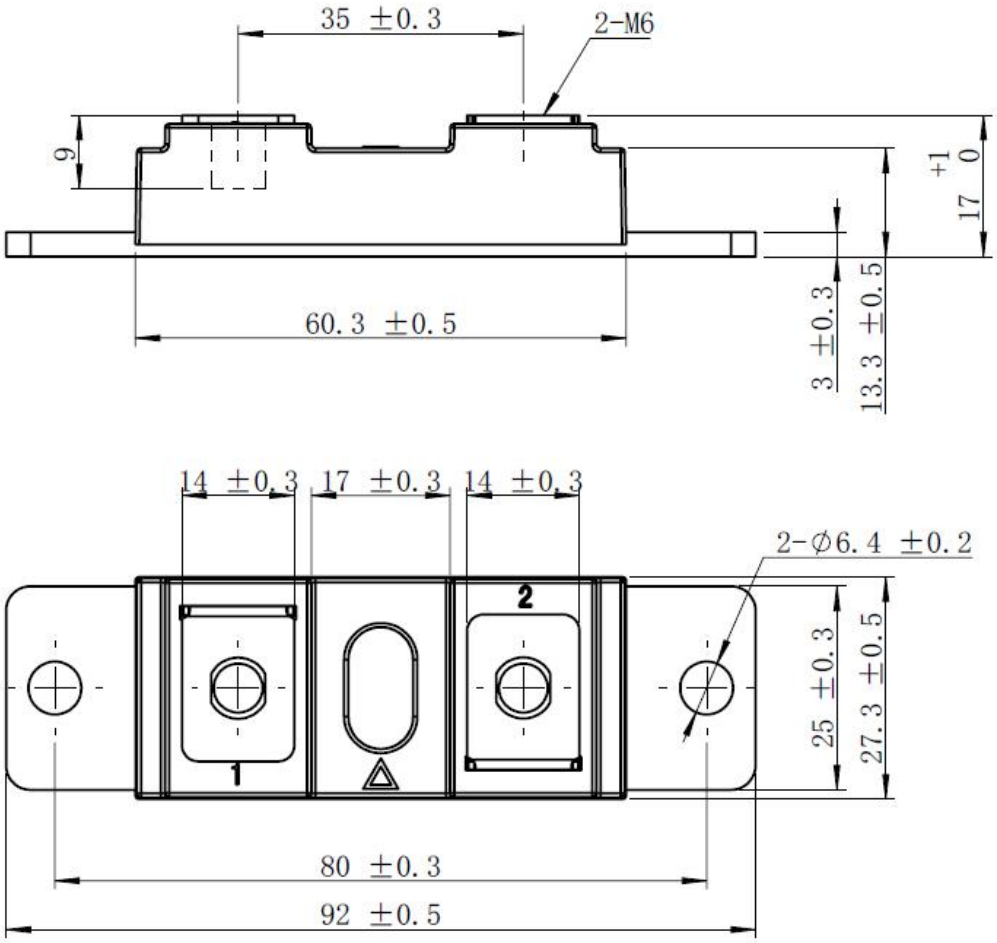


Fig6. Reverse Current VS Reverse Voltage

Package Outlines M45 (Dimensions in mm)



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