



SiC Schottky Power Modules

V_{RRM} 1200V
I_{FAV} 2×90A

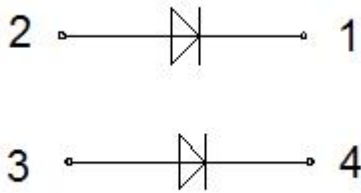
Applications

- Welding Equipment
- Uninterruptible Power Supply (UPS)
- High Frequency Power Supply
- Induction Heating
- High Speed Rectifiers

Features

- **SiC Schottky Diode:**
 - Zero reverse recovery
 - Zero forward recovery
 - Temperature independent switching behavior
 - Positive temperature coefficient VF
- Very low stray inductance
- High level of integration
- Low Forward Voltage
- Isolated package (SOT-227)
- Low noise switching
- RoHS Compliant

Circuit



Maximum Ratings

Symbol	Conditions	Values	Units
V _{RRM}		1200	V
V _{RSM}		1300	V
I _F	T _J =175°C, Per diode	90	A
	T _J =175°C, Per Module	180	A
I _{FSM}	1/2 Cycle , 50Hz, Sine	580	A
T _J		-55 to +175	°C
T _{STG}		-55 to +150	°C
Torque	To Sink Recommended (M4)	0.6~1.2	N·m
Torque	To Terminal Recommended (M4)	0.6~1.1	N·m
Weight		32	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.34	°C/W
R _{th(c-s)}	Per module	0.2	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
I _{RM}	V _R =1200V	--	10	500	uA
	V _R =1200V, T _J =175°C	--	0.6	5	mA
V _F	I _F =90A, , T _J =25°C	--	1.5	1.75	V
	I _F =90A, , T _J =175°C	--	1.95	2.45	



Performance Curves

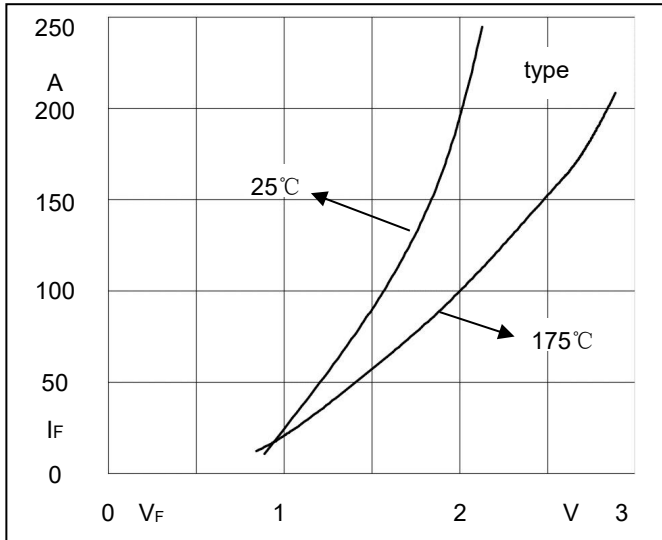


Fig1. Forward Voltage Drop vs Forward Current

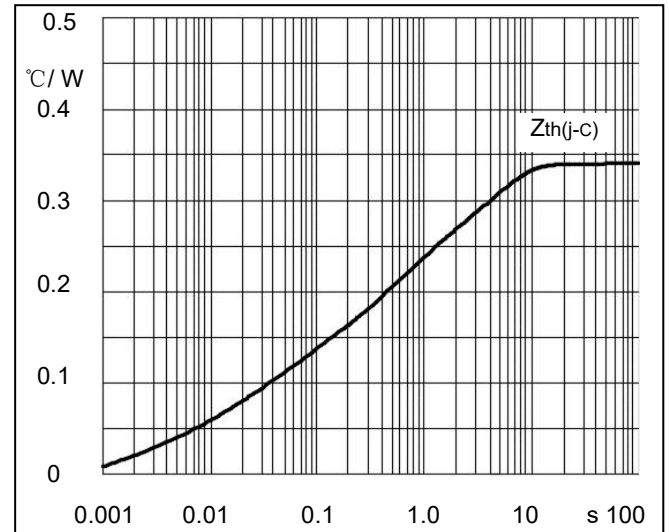


Fig2. Transient thermal impedance

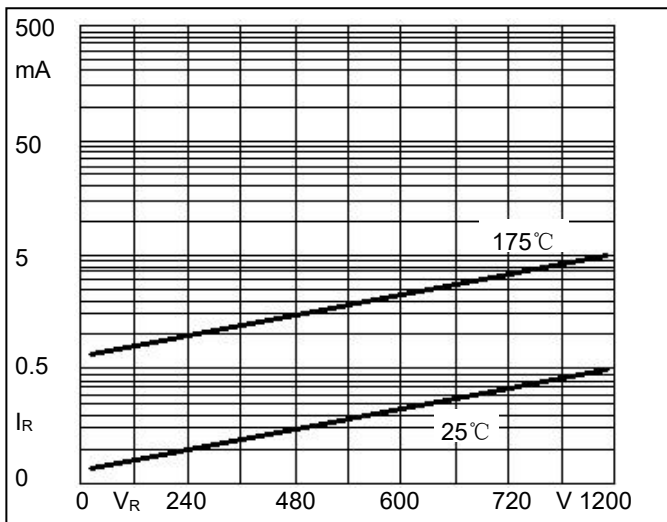
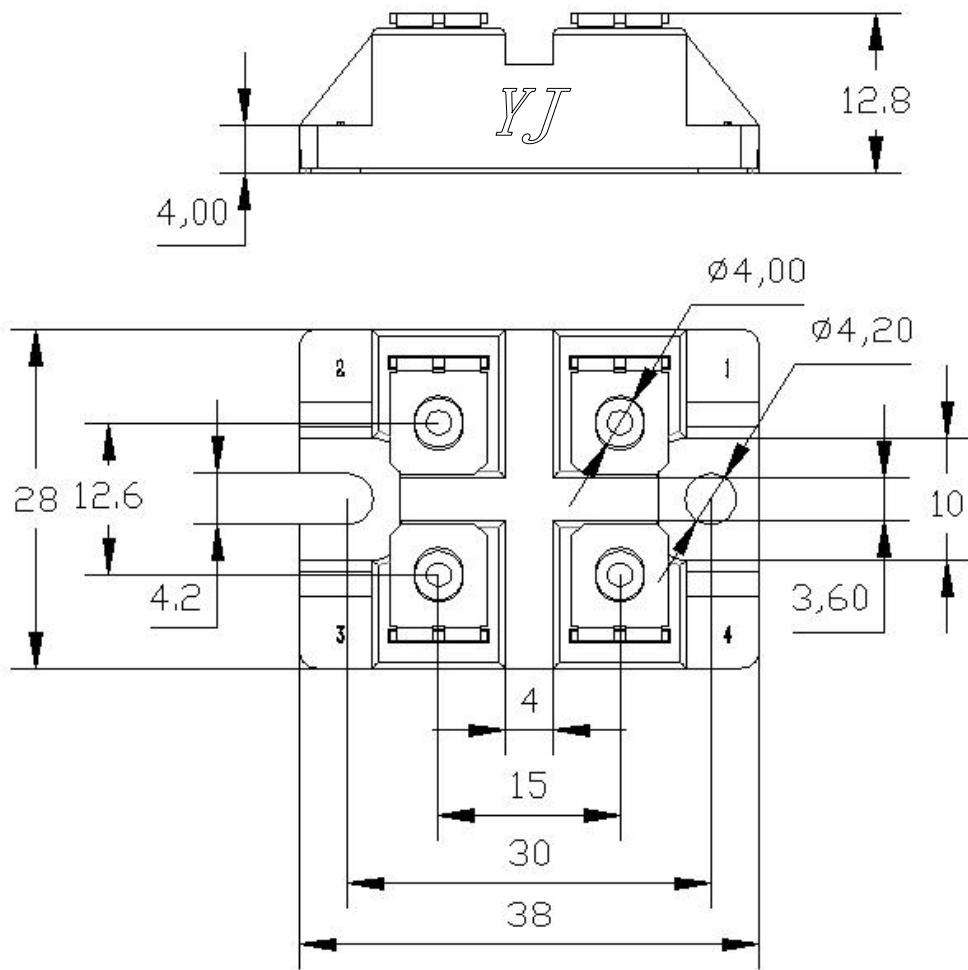


Fig3. Typical Reverse Current

Package Outline Information

CASE: FJ



Dimensions in mm