Power Schottky Rectifier ,240A

Features

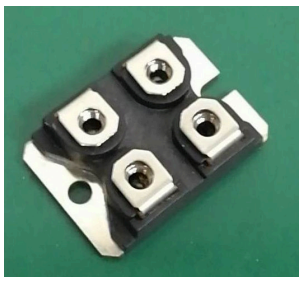
- International standard package SOT-227
- Very low V_F
- Extremely low switching losses
- Low I_{RM}-values
- Copper internally DBC isolated
- Insulated package(V_{ISO} =2500V_{RMS})

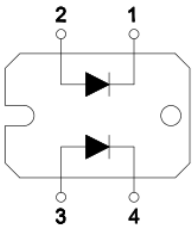
Applications

- Rectifiers in switch mode power Supplies(SMPS)
- Free wheeling diode in low voltage converters

Advantages

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses





DW

I_{FAV}=2×120A

V_{RRM}=200 V

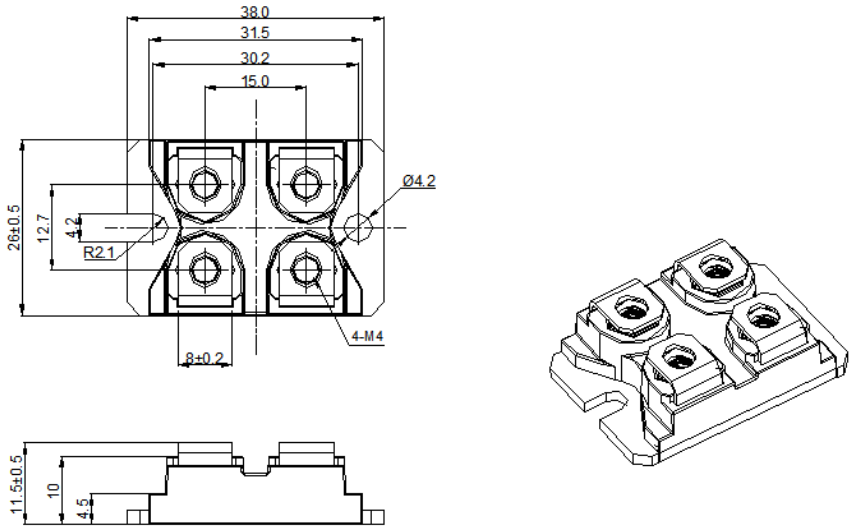
V_F=0.85V

Maximum Ratings				
Symbol	**Test Conditions**		**Ratings**	**Units**
I_{FRMS}			150	A
I_{FAVM}	T_C =105℃; Rectangular, d=0.5; per diode		120	
	T_C =105℃; Rectangular, d=0.5; per module		240	
I_{FSM}	T_{VJ} = 45℃; t_p = 10 ms (50 Hz), sine		1600	
E_S	I_{AS} = 20A; L = 180μH; T_{VJ} = 25℃; non repetitive		0.51	mJ
I_{AR}	V_A=1.5·V_{RRM} typ.; f=10kHz; repetitive		2.5	A
T_{VJ}			-40~+150	℃
T_{stg}			-40~+150	
P_{tot}	T_C=25℃		350	W
M_d	Mounting torque(M4)		1.1~1.5	Nm
	Terminal connection torque(M4)		1.1~1.5	
Weight	Typical		30	g
V_{ISOL}	50/60H_Z, RMS, I_{isol}<1mA	1second	3000	V
		1minute	2500	

Electrical and Thermal Characteristic					
Symbol	**Test Conditions**		**Values**		**Units**
			Typ.	**Max.**	
I_R	$V_R=V_{RRM}$; T_{VJ}=25°C(Pulse Width=5ms,Duty Cycle<2.0%)			2	mA
	$V_R=V_{RRM}$; T_{VJ}=125°C(Pulse Width=5ms,Duty Cycle<2.0%)			40	
V_F	I_F=120A； T_{VJ}=125°C			0.85	V
	I_F=120A； T_{VJ}=25°C			0.95	
	I_F=240A， T_{VJ}=125°C			1.2	
R_{thJC}	Junction to case	Par leg		0.90	°C/W
		Total		0.4	
R_{thCH}			0.10		

Package Outline Information

SOT-227 Package



Dimensions in mm