

Features

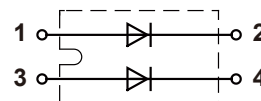
- International standard package
- Isolation voltage 2500 VAC
- 2 independent FRED in 1 package
- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low I_{RM} -values
- Soft recovery behaviour

Typical Applications

- Antiparallel diode for high frequency switching devices
- Free wheeling diode in converters and motor control circuits
- Inductive heating and melting
- Ultrasonic cleaners and welders
- Uninterruptible power supplies (UPS)
- Anti saturation diode
- Snubber diode
- AC/DC Motor drives
- Rectifiers in switch mode power supplies (SMPS)

Absolute Maximum Ratings ($T_c=25^{\circ}\text{C}$ Unless Otherwise Specified)

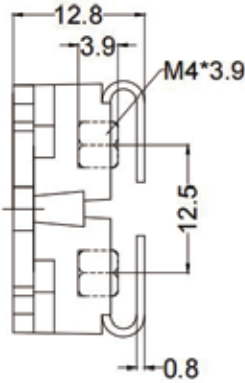
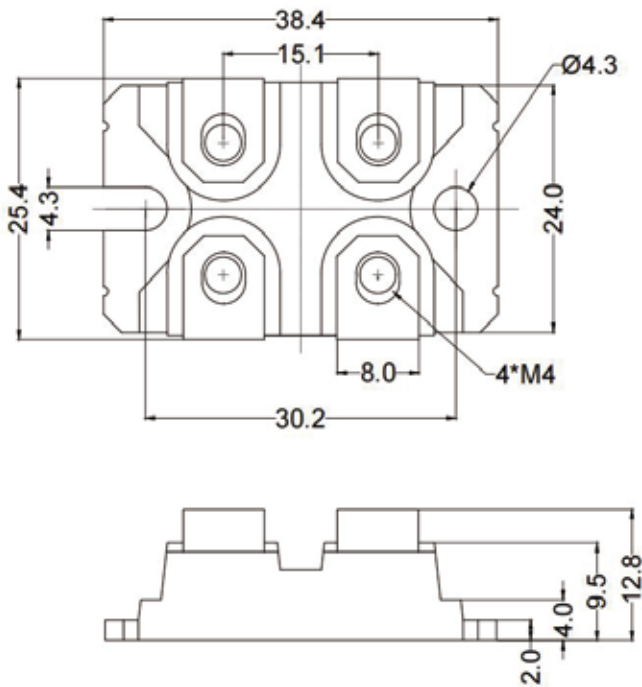
Symbol	Parameter / Test Conditions		Values	Unit
V_R	Maximum d.c. Reverse Voltage		1200	V
V_{RRM}	Maximum Repetitive Reverse Voltage		1200	V
$I_{F(AV)}$	Average Forward Current	$T_c=90^{\circ}\text{C}$, Per Diode	100	A
		$T_c=90^{\circ}\text{C}$, Per Module, $T_{vj}=150^{\circ}\text{C}$	2x100	A
$I_{F(RMS)}$	RMS Forward Current	$T_c=90^{\circ}\text{C}$, Per Diode	157	A
I_{FSM}	Non Repetitive Surge Forward Current	$T_j=45^{\circ}\text{C}$, 10ms, Sine, peak value	850	A
I^2t	For Fusing	$T_j=45^{\circ}\text{C}$, 10ms, Sine, peak value	3610	A^2S
		$T_j=45^{\circ}\text{C}$, 18.3ms, Sine, peak value	3880	A^2S
P_D	Power Dissipation		265	W
T_j	Junction Temperature		-40 to +150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range		-40 to +150	$^{\circ}\text{C}$
V_{iso}	Isolation Breakdown Voltage	AC , 50Hz(RMS), $t=1\text{min}$	2500	V
R_{thjc}	Junction to Case Thermal Resistance(Per Diode)		0.6	$^{\circ}\text{C}/\text{W}$
Torque	Module to Sink	M4	1.0-1.5	Nm
	Module Electrodes	M4	1.0-1.5	Nm
Weight			30	g



Electrical Characteristics (Tc=25°C Unless Otherwise Specified)

Symbol	Parameter / Test Conditions		Min.	Typ.	Max.	Unit
IRRM	Maximum Reverse Leakage Current	VR=1200V			0.05	mA
		VR=1200V,TJ=150°C			3	mA
VF	Forward Voltage	IF=60A		1.8	2.3	V
		IF=60A,TJ=125°C		1.6		V
trr	Reverse Recovery Time (IF=1A, dIF/dt=-200A/μs,VR=30V)			60		ns
IRM	Maximum Reverse Recovery Current	VR=600V,IF=30A -dIF/dt=200A/μs,Tvj=125°C		15		A

Outlines



miniBLOC, SOT-227