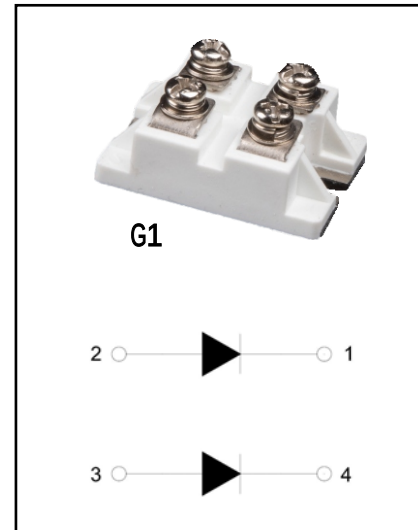


PRODUCT FEATURES

- Blocking voltage:800 to 1800V
- Heat transfer through aluminum oxide DBC
- ceramic isolated metal baseplate
- Glass passivated chip
- Popular SOT-227 Package

APPLICATIONS

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors



ABSOLUTE MAXIMUM RATINGS

$T_C=25^{\circ}\text{C}$ unless otherwise specified

Maximum Ratings

Symbol	Conditions	Values	Units
I_{FAV}	Single phase ,half wave 180° conduction $T_C=109^{\circ}\text{C}$	100	A
I_{FSM}	$t=10\text{mS}$ $T_{vj}=45^{\circ}\text{C}$	1916	A
i^2t	$t=10\text{mS}$ $T_{vj}=45^{\circ}\text{C}$	31250	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T_{vj}		-40 to +150	$^{\circ}\text{C}$
T_{stg}		-40 to +125	$^{\circ}\text{C}$
M_t	To terminals(M4)	$2 \pm 15\%$	Nm
M_s	To heatsink(M4)	$2 \pm 15\%$	Nm
Weight	Module (Approximately)	39	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per diode	0.35	$^{\circ}\text{C/W}$
$R_{th(c-s)}$	Module	0.1	$^{\circ}\text{C/W}$

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{FM}	$T=25^{\circ}\text{C}$ $I_F=300\text{A}$	—	1.30	1.35	V
I_{RD}	$T_{vj}=150^{\circ}\text{C}$ $V_{RD}=V_{RRM}$	—	—	5	mA

Performance Curves

$T_C = 25^\circ\text{C}$ unless otherwise specified

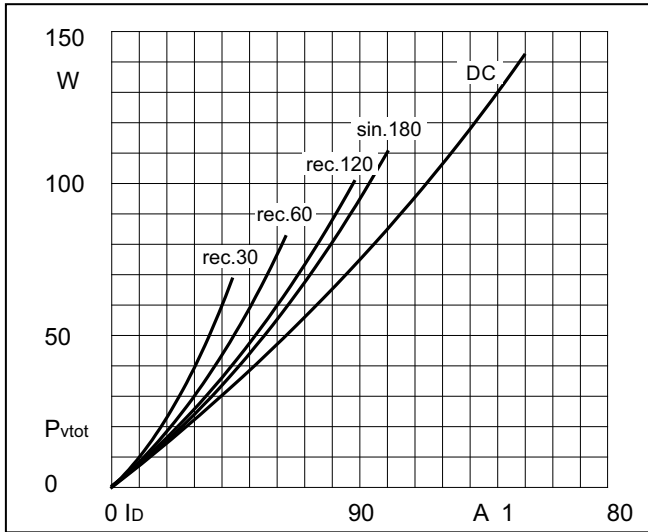


Fig1. Power dissipation

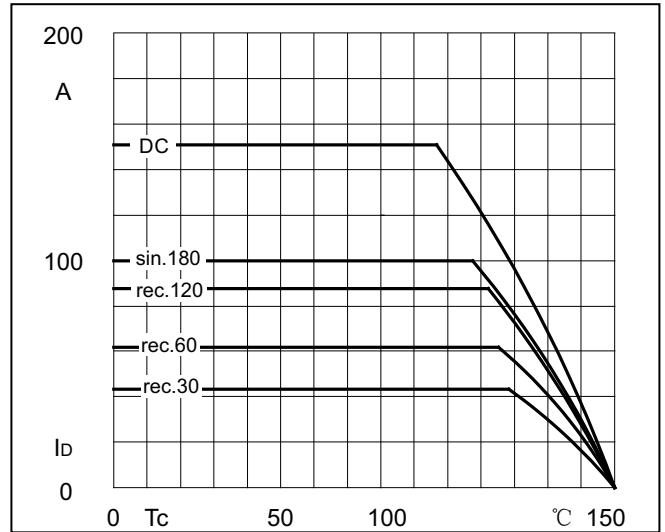


Fig2. Forward Current Derating Curve

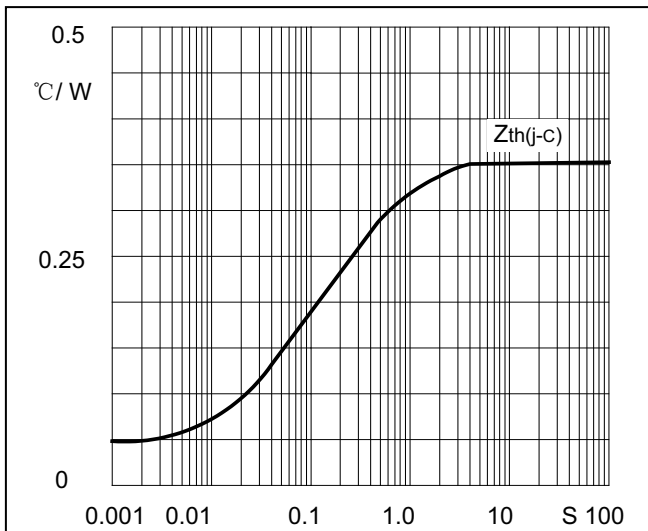


Fig3. Transient thermal impedance

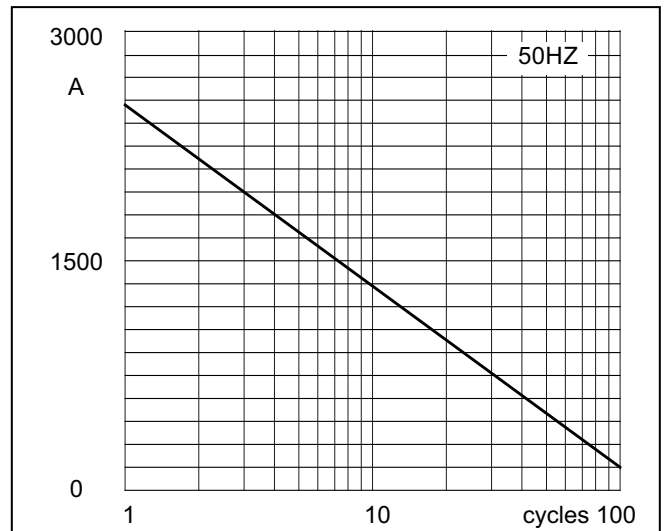


Fig4. Max Non-Repetitive Forward Surge Current

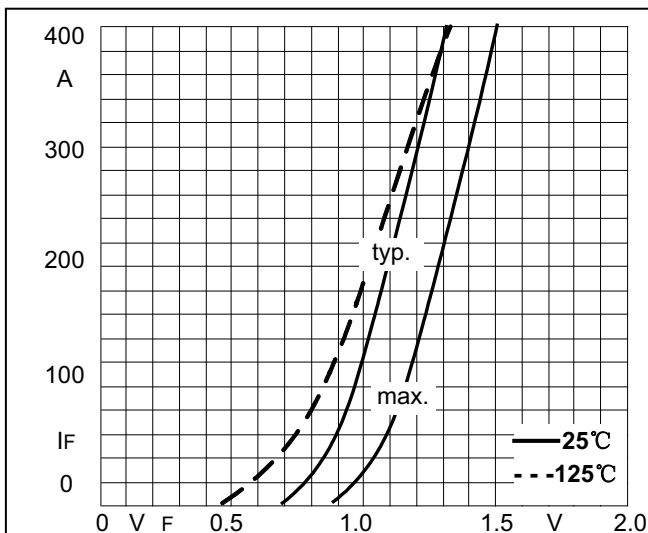
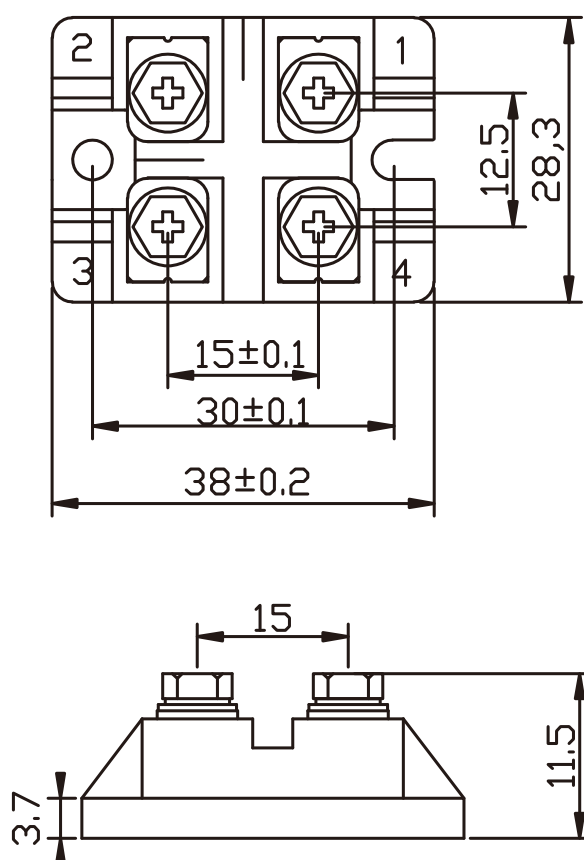


Fig5. Forward Characteristics

Package Outline



Dimensions (mm)