

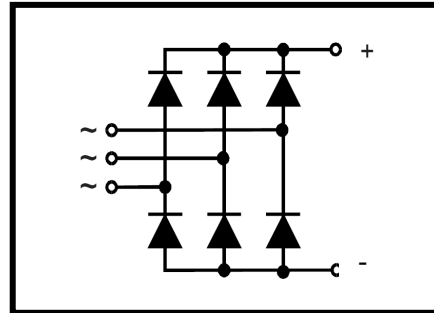
## Features

- Package with screw terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1600 V
- Low forward voltage drop
- UL registered E332185



## Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors



## Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling

## ABSOLUTE MAXIMUM RATINGS

T<sub>C</sub>=25°C unless otherwise specified

Symbol	Test Condition	Value	Unit
V <sub>RRM</sub>		1600	V
I <sub>d(AV)</sub>	T <sub>C</sub> =100°C, module	150	A
I <sub>FSM</sub>	T <sub>J</sub> =45°C; t=10ms (50Hz),sine	1500	A
	V <sub>R</sub> =0 t=8.3ms(60Hz),sine	1700	A
	T <sub>J</sub> =150°C; t=10ms (50Hz),sine	1350	A
	V <sub>R</sub> =0 t=8.3ms(60Hz),sine	1500	A
I <sup>2</sup> t	T <sub>J</sub> =45°C; t=10ms (50Hz),sine	11250	A <sup>2</sup> s
	V <sub>R</sub> =0 t=8.3ms(60Hz),sine	14450	A <sup>2</sup> s
	T <sub>J</sub> =150°C; t=10ms (50Hz),sine	9100	A <sup>2</sup> s
	V <sub>R</sub> =0 t=8.3ms(60Hz),sine	11250	A <sup>2</sup> s
T <sub>J</sub> ,T <sub>STG</sub>		-40 to +150	°C
T <sub>JM</sub>		150	°C
V <sub>ISOL</sub>	50/60Hz RMS t=1 min	2500	V~
	I <sub>ISOL</sub> ≤1mA t=6s	3000	V~
Md	Mounting torque(M6)	5±15%	N·m
	Terminal connection torque(M6)	5±15%	N·m
Weight	typical	241	g

**ELECTRICAL AND THERMAL CHARACTERISTICS**  $T_C=25^{\circ}\text{C}$  unless otherwise specified

Symbol	Test Condition	Value	Unit
$I_R$	$V_R = V_{RRM}; T_J = 25^{\circ}\text{C}$	$\leq 0.5$	mA
	$V_R = V_{RRM}; T_J = T_{JM}$	$\leq 5$	mA
$V_F$	$I_F = 300\text{A}; T_J = 125^{\circ}\text{C}$	1.56	V
$V_{T0}$	For power-loss calculations only	0.8	V
$R_{thJC}$	per diode	0.6	K/W
	Per module	0.1	K/W
$R_{thCS}$	per diode	0.18	K/W
	per module	0.03	K/W
$d_S$	Creeping distance on surface	10	mm
$d_A$	Cree page distance in air	9.4	mm
$a$	Max. allowable acceleration	50	$\text{m/s}^2$

**NOTE:** Data according to IEC 60747 and refer to a single diode unless otherwise stated.

**Package Outline (Dimensions in mm)**

