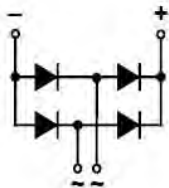
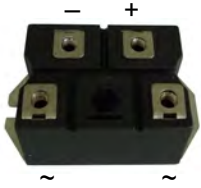
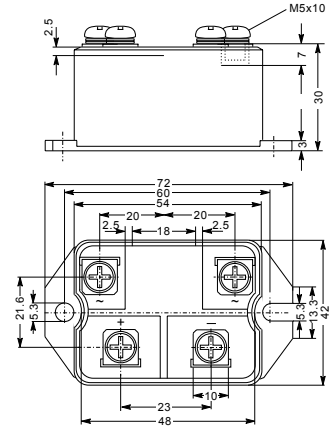


Single Phase Bridge Rectifiers Modules



Type	V _{RSM}	V _{RRM}
	V	V
S1PDB52N08	900	800
S1PDB52N10	1100	1000
S1PDB52N12	1300	1200
S1PDB52N14	1500	1400
S1PDB52N16	1700	1600
S1PDB52N18	1900	1800

Dimensions in mm (1mm=0.0394")



Symbol	Test Conditions	Maximum Ratings	Unit
I_{dav}	T _C =100°C, module	52	A
I_{dav}	T _A =45°C (R _{thCA} =0.6K/W), module	41	
I_{FSM}	T _{VJ} =45°C	550	A
	t=10ms (50Hz), sine	600	
	V _R =0	500	
	t=8.3ms (60Hz), sine	550	
I²t	T _{VJ} =45°C	1520	A ² s
	V _R =0	1520	
	T _{VJ} =T _{VJM}	1250	
	V _R =0	1250	
T_{VJ}		-40...+150	°C
T_{VJM}		150	
T_{stg}		-40...+125	
V_{ISOL}	50/60Hz, RMS	2500	V~
	I _{ISOL} ≤1mA	3000	
M_d	Mounting torque (M5)	5 ± 15%	Nm
	Terminal connection torque (M5)	5 ± 15%	
Weight	typical	148	g

S1PDB52NXX

Single Phase Bridge Rectifiers Modules

Symbol	Test Conditions	Characteristic Values	Unit
I_R	$V_R = V_{RRM}; T_{VJ} = 25^{\circ}\text{C}$ $V_R = V_{RRM}; T_{VJ} = T_{VJM}$	≤ 0.3 ≤ 5	mA
V_F	$I_F = 150\text{A}; T_{VJ} = 25^{\circ}\text{C}$	≤ 1.8	V
V_{TO}	For power-loss calculations only	0.8	V
r_T	$T_{VJ} = T_{VJM}$	8	$\text{m}\Omega$
R_{thJC}	per diode per module	1.45 0.24	K/W
R_{thJK}	per diode per module	1.87 0.31	K/W
d_s	Creeping distance on surface	10	mm
d_A	Creepage distance in air	9.4	mm
a	Max. allowable acceleration	50	m/s^2

FEATURES

- * Package with screw terminals
- * Isolation voltage 3000 V~
- * Glass passivated chips
- * Blocking voltage up to 1800 V
- * Low forward voltage drop
- * UL File NO.E310749
- * RoHS compliant

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