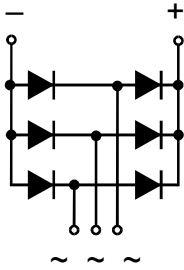
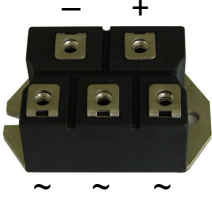


S3PDB- - N16

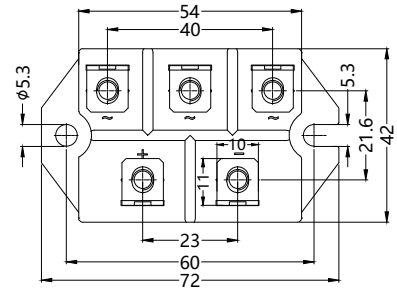
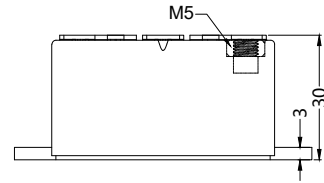
Three Phase Rectifier Modules



Type	V _{RSM} V	V _{RRM} V
S3PDB- - N08	900	800
S3PDB- - N12	1300	1200
S3PDB- - N14	1500	1400
S3PDB- - N16	1700	1600
S3PDB- - N18	1900	1800



Dimensions in mm (1mm=0.0394")



Symbol	Test Conditions	Maximum Ratings	Unit
I _{dav}	T _C =100°C, module	100	A
I _{FSM}	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	920 1000	A
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	770 850	
I ² t	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	5500 5500	A ² s
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	3800 3800	
T _{VJ} T _{VJM} T _{stg}		-40...+150 150 -40...+125	°C
V _{ISOL}	50/60Hz, RMS I _{ISOL} ≤1mA t=1min t=1s	2500 3000	V~
M _d	Mounting torque (M5) Terminal connection torque (M5)	5 ± 15% 5 ± 15%	Nm
Weight	typical	160	g



S3PDB- - N16

Three Phase Rectifier Modules

Symbol	Test Conditions	Characteristic Values	Unit
I_R	V _R =V _{R_{RM}} ; T _{VJ} =25°C V _R =V _{R_{RM}} ; T _{VJ} =T _{VJM}	≤ 0.3 ≤ 5	mA
V_{FM}	I _{FM} = 100A; T _{VJ} =25°C	≤ 1.20	V
V_{Fo}	For power-loss calculations only	0.8	V
r_F	T _{VJ} =T _{VJM}	4	mΩ
R_{thJC}	per diode per module	0.58 0.097	K/W
R_{thJK}	per diode per module	0.825 0.138	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

S3PDB- - N16

Three Phase Rectifier Modules

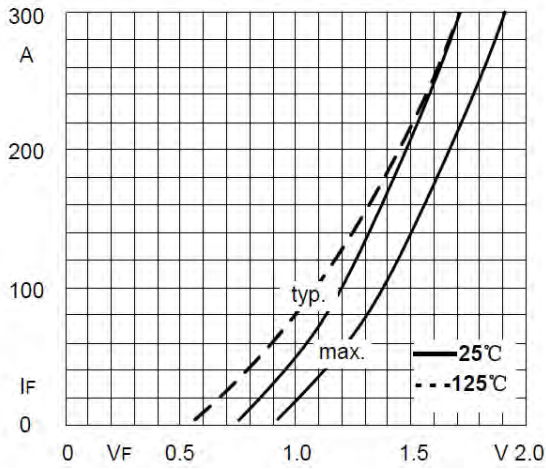


Fig1. Forward Characteristics

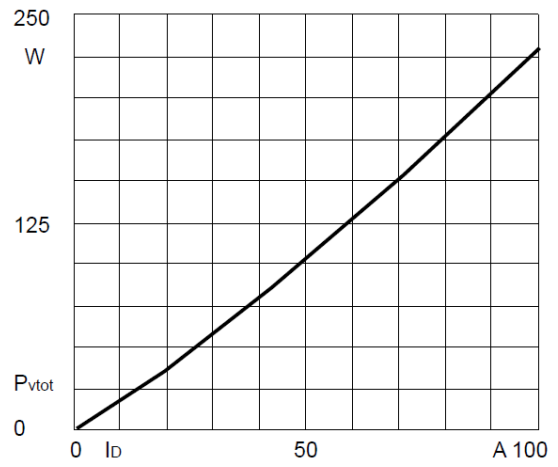


Fig2. Power dissipation

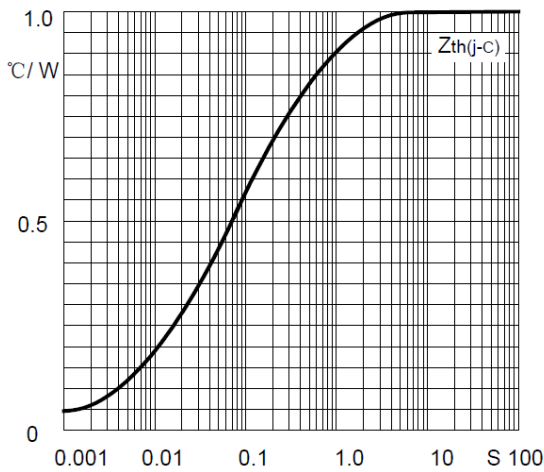


Fig3. Transient thermal impedance

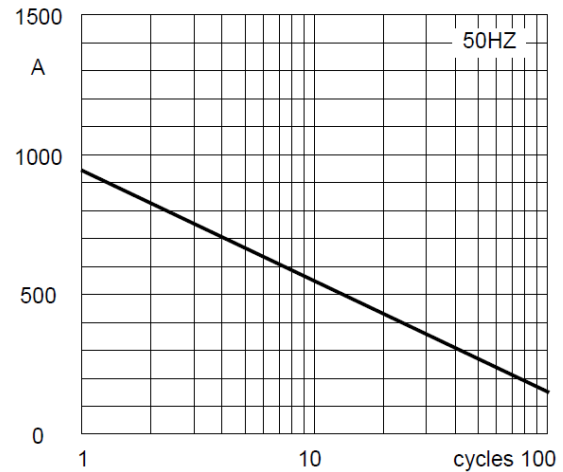


Fig4. Max Non-Repetitive Forward Surge Current

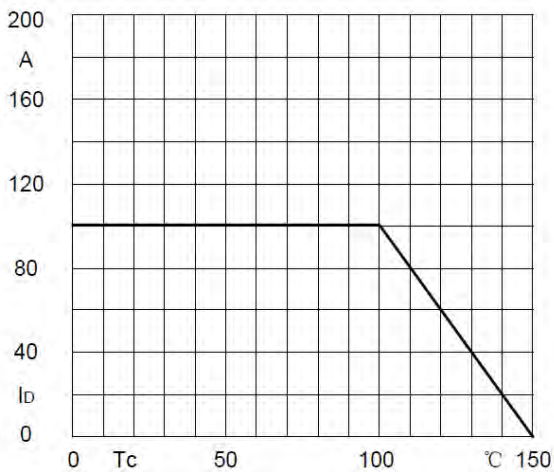


Fig5. Forward Current Derating Curve

