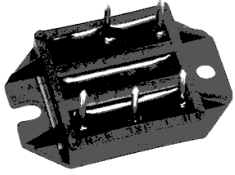
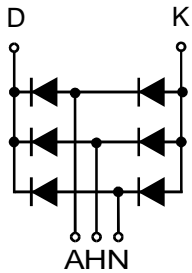


S3PDB86

Three Phase Rectifier Modules

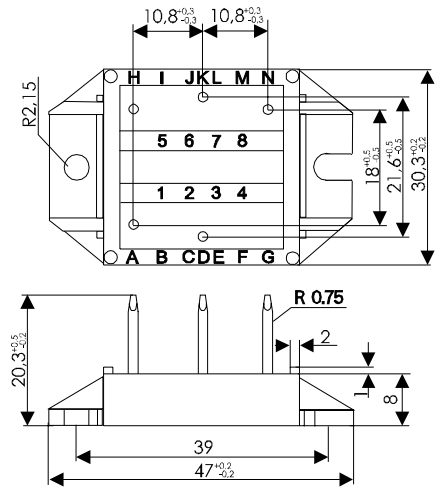


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Type	V _{RSM} V	V _{RRM} V
S3PDB86N08	900	800
S3PDB86N12	1300	1200
S3PDB86N14	1500	1400
S3PDB86N16	1700	1600
S3PDB86N18	1900	1800

Dimensions in mm (1mm=0.0394")



Symbol	Test Conditions	Maximum Ratings	Unit
I _{dav}	T _C =90°C, module	86	A
I _{dav}	T _A =45°C (R _{thCA} =0.6K/W), module	-	
I _{FSM}	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	530 570	A
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	480 520	
I ² t	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	1400 1360	A ² s
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	1150 1140	
T _{VJ} T _{VJM} T _{stg}		-40...+150 150 -40...+125	°C
V _{ISO L}	50/60Hz, RMS I _{ISO L} ≤1mA t=1min t=1s	2500 3000	V~
M _d	Mounting torque (M4)	1.5-2 14-18	Nm lb.in.
Weight	typ.	18	g



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S3PDB86

Three Phase Rectifier Modules

Symbol	Test Conditions	Characteristic Values	Unit
I_R	$V_R=V_{RRM}; T_{VJ}=25^{\circ}\text{C}$ $V_R=V_{RRM}; T_{VJ}=T_{VJM}$	≤ 0.5 ≤ 3	mA
V_F	$I_F=80\text{A}; T_{VJ}=25^{\circ}\text{C}$	≤ 1.5	V
V_{TO}	For power-loss calculations only	0.8	V
r_T		7.5	$\text{m}\Omega$
R_{thJC}	per diode; DC current per module	1.2 0.2	K/W
R_{thJK}	per diode; DC current per module	1.5 0.25	K/W
d_s	Creeping distance on surface	11.2	mm
d_A	Creepage distance in air	9.7	mm
a	Max. allowable acceleration	50	m/s^2

FEATURES

- * Package with DCB base plate
- * Isolation voltage 3000 V~
- * Planar passivated chips
- * Leads suitable for PCB soldering
- * Low forward voltage drop

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