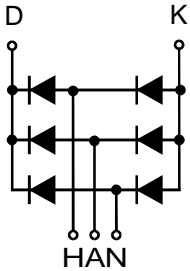
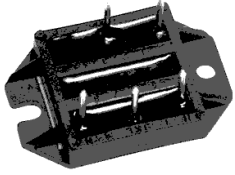


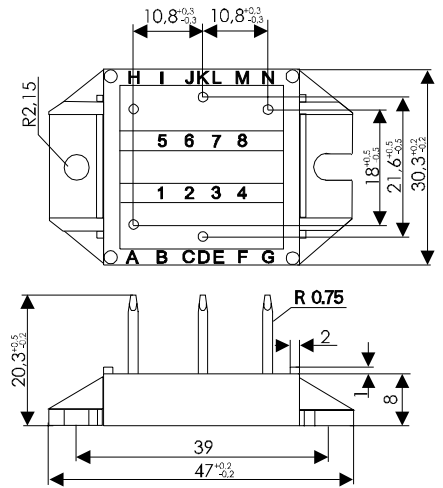
S3PDB25

Three Phase Rectifier Modules



Type	V _{RSM} V	V _{RRM} V
S3PDB25N08	900	800
S3PDB25N12	1300	1200
S3PDB25N14	1500	1400
S3PDB25N16	1700	1600
S3PDB25N18	1900	1800

Dimensions in mm (1mm=0.0394")



Symbol	Test Conditions	Maximum Ratings	Unit
I _{dav}	T _C =100°C, module	25	A
I _{FSM}	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	100 106	A
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	85 90	
I ² t	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	50 47	A ² s
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	36 33	
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 (M4)	1.5-2 14-18	Nm lb.in.
Weight	typ.	18	g

S3PDB25

Three Phase Rectifier Modules

Symbol	Test Conditions	Characteristic Values	Unit
I_R	$V_R=V_{RRM}; T_{VJ}=25^{\circ}\text{C}$ $V_R=V_{RRM}; T_{VJ}=T_{VJM}$	≤ 0.3 ≤ 5	mA
V_F	$I_F=7\text{A}; T_{VJ}=25^{\circ}\text{C}$	≤ 1.12	V
V_{TO}	For power-loss calculations only	0.8	V
r_T		40	$\text{m}\Omega$
R_{thJC}	per diode; DC current per module	2.3 0.39	K/W
R_{thJH}	per diode; DC current per module	2.8 0.47	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