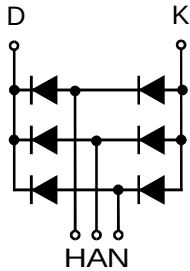
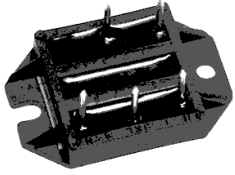


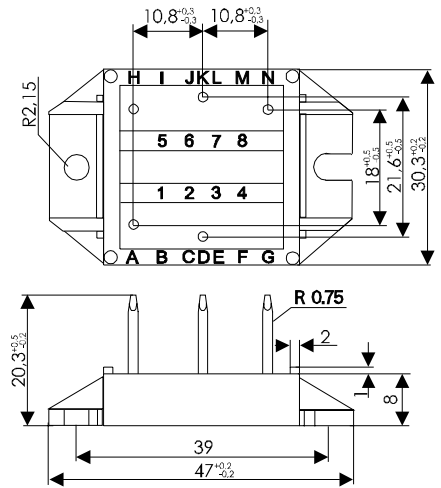
S3PDB25

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}	$T_C=100^{\circ}\text{C}$, module		25	A
I_{FSM}	$T_{VJ}=45^{\circ}\text{C}$	$t=10\text{ms}$ (50Hz), sine	100	A
	$V_R=0$	$t=8.3\text{ms}$ (60Hz), sine	106	
	$T_{VJ}=T_{VJM}$	$t=10\text{ms}$ (50Hz), sine	85	
	$V_R=0$	$t=8.3\text{ms}$ (60Hz), sine	90	
I^2t	$T_{VJ}=45^{\circ}\text{C}$	$t=10\text{ms}$ (50Hz), sine	50	A^2s
	$V_R=0$	$t=8.3\text{ms}$ (60Hz), sine	47	
	$T_{VJ}=T_{VJM}$	$t=10\text{ms}$ (50Hz), sine	36	
	$V_R=0$	$t=8.3\text{ms}$ (60Hz), sine	33	
T_{VJ} T_{VJM} T_{stg}			-40...+150 150 -40...+125	$^{\circ}\text{C}$
V_{ISOL}	50/60Hz, RMS $I_{ISOL}\leq 1\text{mA}$	$t=1\text{min}$ $t=1\text{s}$	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	m Ω
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