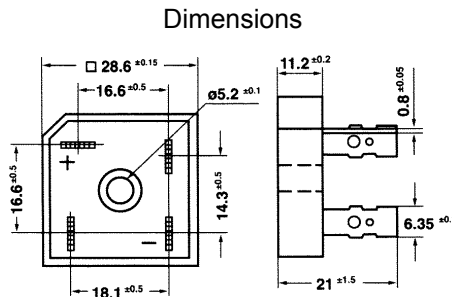


# S1PDB35005 thru S1PDB3518

## Single Phase Bridge Rectifiers Modules



	V <sub>RRM</sub> V	V <sub>RMS</sub> V	V <sub>DC</sub> V
S1PDB35005	50	35	50
S1PDB3501	100	70	100
S1PDB3502	200	140	200
S1PDB3504	400	280	400
S1PDB3506	600	420	600
S1PDB3508	800	560	800
S1PDB3510	1000	700	1000
S1PDB3512	1200	840	1200
S1PDB3514	1400	980	1400
S1PDB3516	1600	1120	1600
S1PDB3518	1800	1260	1800

Symbol	Characteristics	Maximum Ratings	Unit
I <sub(av)< sub=""></sub(av)<>	Maximum Average Forward Rectified Current @T <sub>c</sub> =50°C (With Heatsink)	35.0	A
I <sub>FSM</sub>	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	400	A
V <sub>F</sub>	Maximum Forward Voltage At 17.5A DC	1.1	V
I <sub>R</sub>	Maximum DC Reverse Current At Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	5.0 500	uA
I <sup>2</sup> t	I <sup>2</sup> t Rating For Fusing (t < 8.3 ms), (Note 1)	660	A <sup>2</sup> S
C <sub>J</sub>	Typical Junction Capacitance Per Element (Note 2)	150	pF
R <sub>θJC</sub>	Typical Thermal Resistance (Note 3)	1.2	°C/W
T <sub>J</sub>	Operating Temperature Range	-55 to +150	°C
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C

NOTES: 1. Measured At Non-repetitive, For Greater Than 1ms And Less Than 8.3ms.  
 2. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.  
 3. Device Mounted On 300mm x 300mm x 1.6mm Cu Plate Heatsink.

### FEATURES

- \* Rating to 1000V PRV
- \* High efficiency
- \* Glass passivated chip junction
- \* Electrically isolated metal case for maximum heat dissipation
- \* UL file NO.310749
- \* RoHS compliant

### MECHANICAL DATA

- \* Case: Molded plastic with Heatsink internally mounted in the bridge encapsulation
- \* Polarity: As marked on Body
- \* Mounting: Hole for # 10 screw
- \* Weight: 18 grams



# S1PDB35005 thru S1PDB3518

## Single Phase Bridge Rectifiers Modules

FIG.1 - FORWARD CURRENT DERATING CURVE

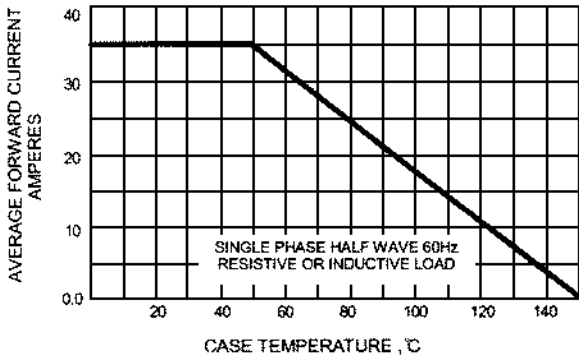


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

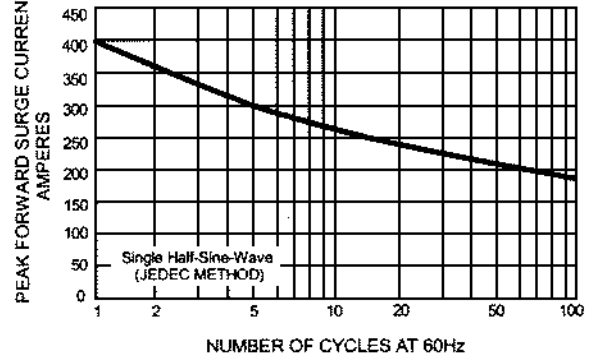


FIG.3 - TYPICAL JUNCTION CAPACITANCE

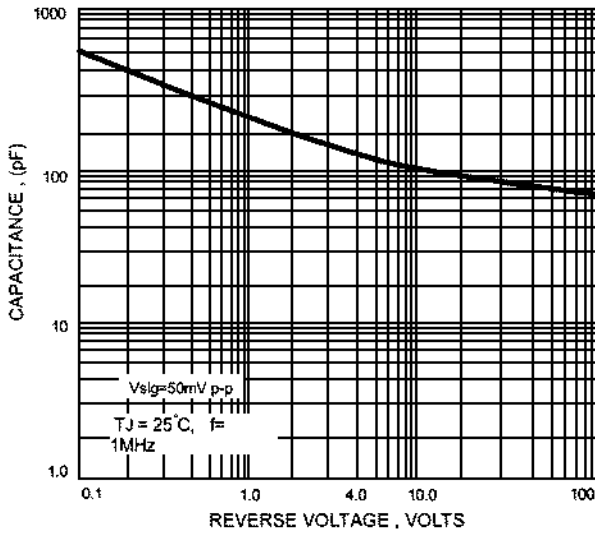


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

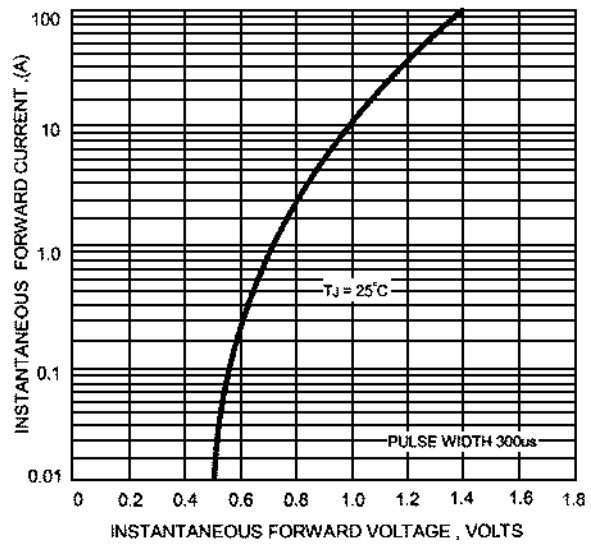


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

