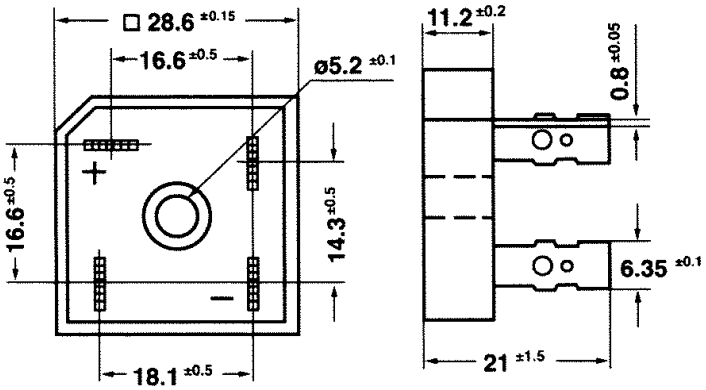
S1PDB25005 thru S1PDB2516

Single Phase Bridge Rectifiers



Dimensions



	V_{RRM} V	V_{RWS} V	V_{DC} V
S1PDB25005	50	35	50
S1PDB2502	200	140	200
S1PDB2504	400	280	400
S1PDB2506	600	420	600
S1PDB2508	800	560	800
S1PDB2512	1200	840	1200
S1PDB2516	1600	1120	1600

Symbol	Characteristics	Maximum Ratings	**Unit**
$I_{(AV)}$	Maximum Average Forward Rectified Current @T_C=60°C (With Heatsink)	25.0	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	350	A
V_F	Maximum Forward Voltage At 12.5A DC	1.1	V
I_R	Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=125°C	5.0 500	uA
I^2t	I^2t Rating For Fusing (t < 8.3 ms), (Note 1)	374	A^2S
C_J	Typical Junction Capacitance Per Element (Note 2)	130	pF
$R_{\theta JC}$	Typical Thermal Resistance (Note 3)	1.3	°C/W
T_J	Operating Temperature Range	-55 to +150	°C
T_{STG}	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 1600V PRV
* High efficiency
* Glass passivated chip junction
* Electrically isolated metal case for maximum heat dissipation
* 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

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S1PDB25005 thru S1PDB2516

Single Phase Bridge Rectifiers

FIG.1 - FORWARD CURRENT DERATING CURVE

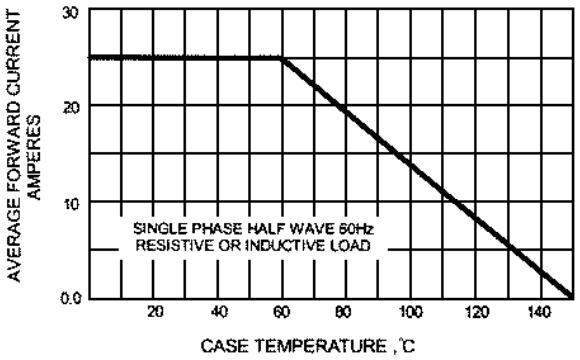


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

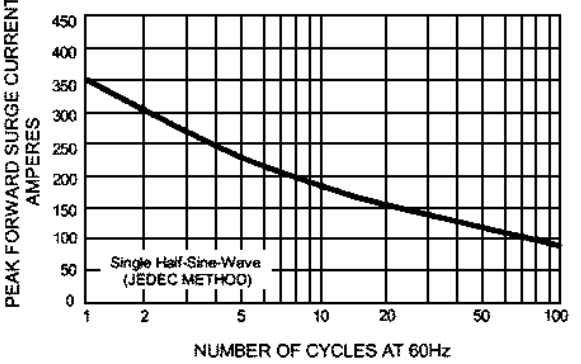


FIG.3 - TYPICAL JUNCTION CAPACITANCE

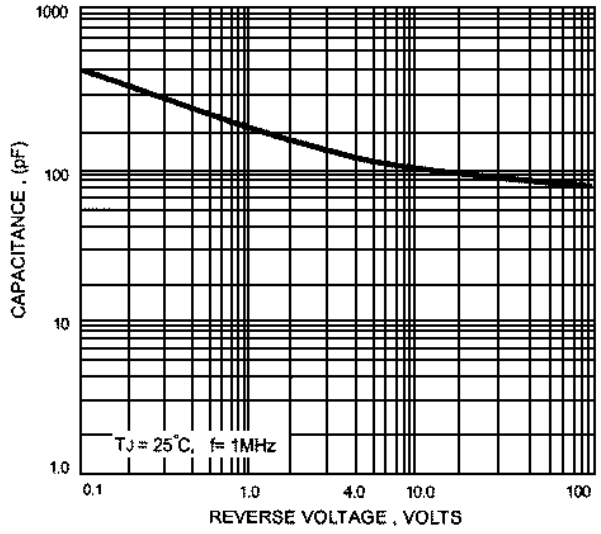


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

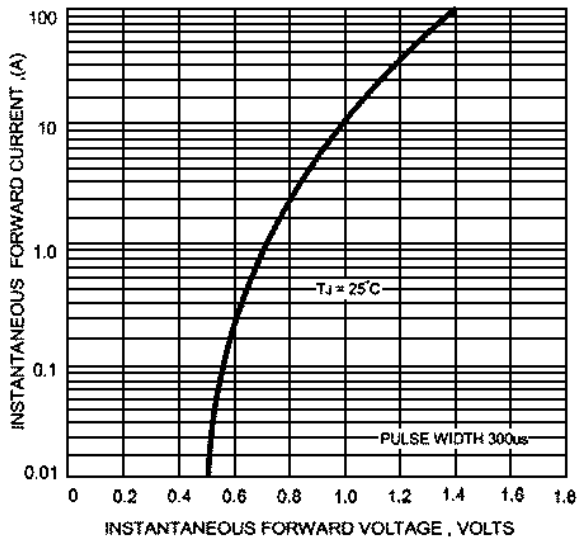
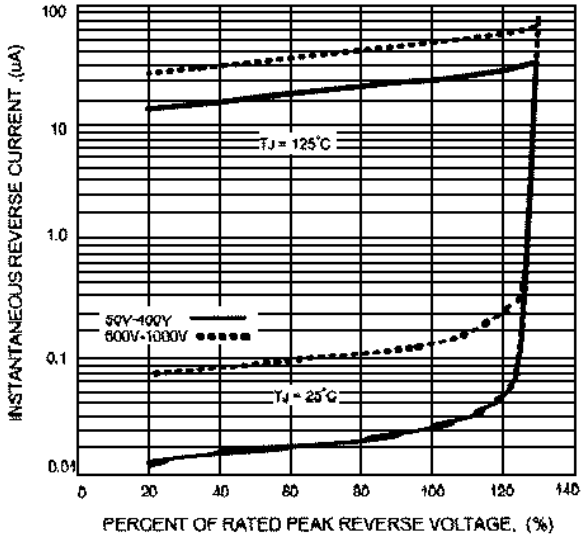


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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