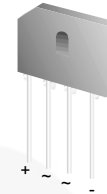


# DFB2505 - DFB25100

## Glass Passivated Bridge Rectifiers

### Features

- UL Certificate # E326243
- Glass Passivated Junction
- Ideal for Printed Circuit Board
- Reliable Low Cost Construction
- Plastic Material has Underwriters Laboratory Flammability Classification 94V-0
- Surge Overload Rating to 350 Amperes Peak
- High Case Dielectric Strength of 2500 V<sub>RMS</sub>
- Isolated Voltage from Case to Lead Over 2500 Volts



TS-6P

### Absolute Maximum Ratings\* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value							Units
		DFB25 05	DFB25 10	DFB25 20	DFB25 40	DFB25 60	DFB25 80	DFB25 100	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
$V_{RMS}$	Maximum RMS Voltage	35	70	140	280	420	560	700	V
$V_{DC}$	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
$I_{(AV)}$	Maximum Average Forward Rectified Current	25							A
$I_{FSM}$	Peak Forward Surge Current (8.3mS Single Half-wave)	350							A
$R_{\theta JC}$	Typical Thermal Resistance**	4.75							$^\circ\text{C}/\text{W}$
$T_J$	Operating Temperature Range	-55 to +150							$^\circ\text{C}$
$T_{STG}$	Storage Temperature Range	-55 to +150							$^\circ\text{C}$

\* Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

\*\* Device mounted on 4" x 6" x 0.25" Al-plate heat sink.

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Test condition	Value	Unit
$V_F$	Maximum Instantaneous Forward Voltage	@ 12.5A @ 25A	1.0 1.1	V
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$	10 500	$\mu\text{A}$
$I^2t$	Rating for fusing ( $t < 8.3\text{mS}$ )		508	$\text{A}^2\text{S}$
$C_j$	Typical Junction Capacitance per leg*		110	pF

\* Measured at 1MHz and applied Reverse bias of 4.0V DC.

### Typical Performance Characteristics

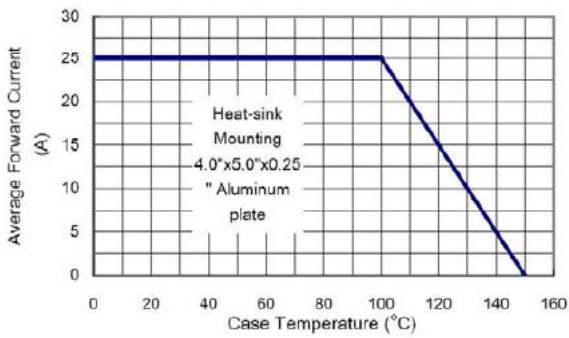


Figure 1. Maximum Derating Curve for Output Current

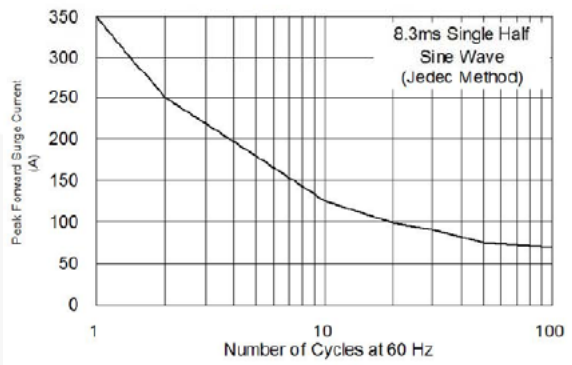


Figure 2. Maximum Forward Surge Current

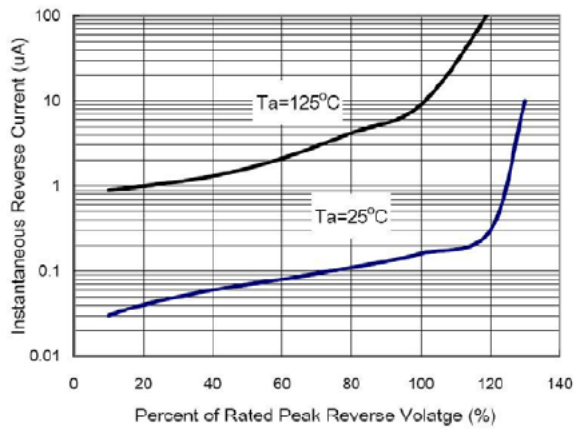


Figure 3. Typical Reverse Characteristics per Leg

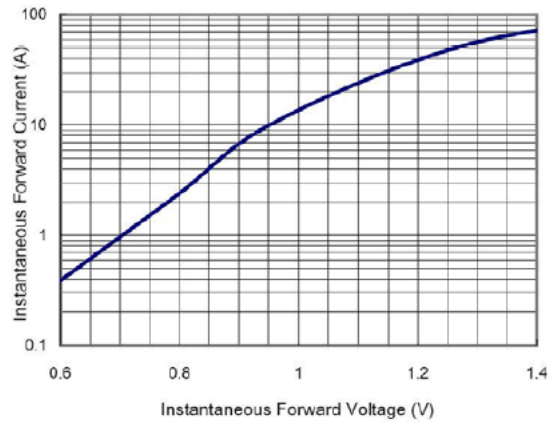


Figure 4. Typical Forward Characteristics per Leg

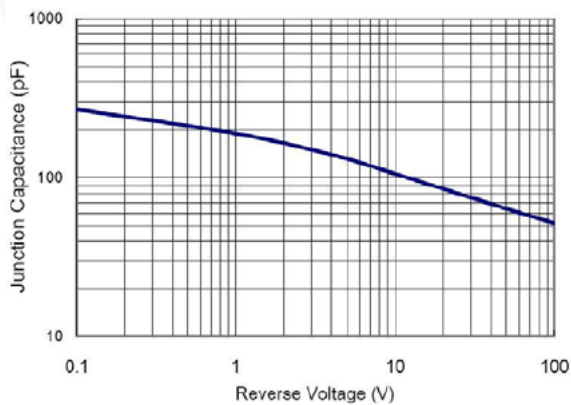
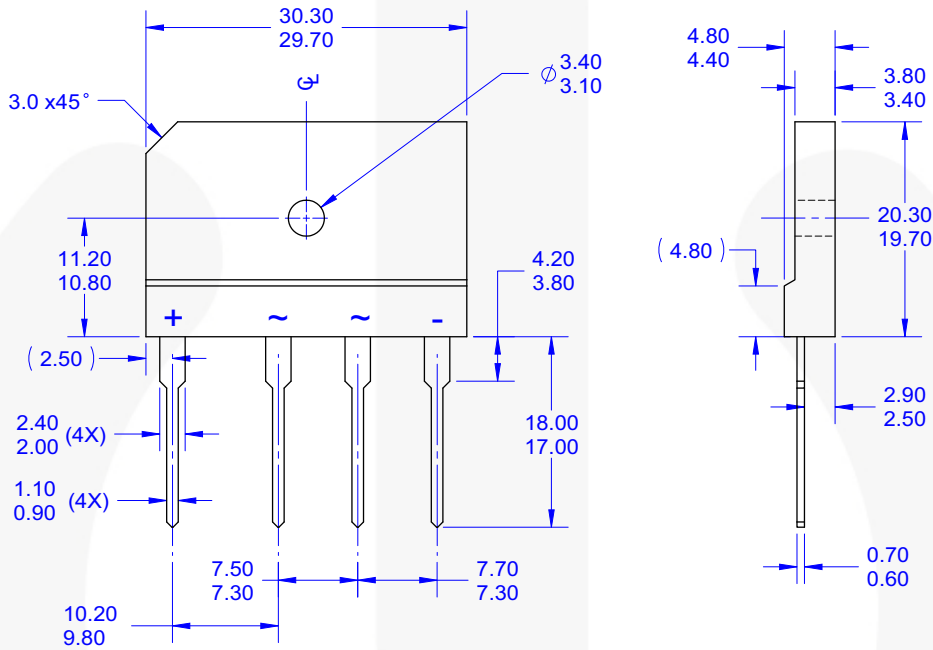


Figure 5. Typical Junction Capacitance

Physical Dimensions

TS-6P



NOTES:



- A. THIS PACKAGE DOES NOT CONFORM TO ANY STANDARDS.
- B. ALL DIMENSIONS ARE IN MILLIMETERS.
- C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
- D. DRAWING FILE NAME: TS6P04AREV1

Dimensions in Millimeters



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- |                          |  |   |   |
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| AccuPower™               | FRFET®   | PowerXS™  | the <b>power</b> franchise  |
| AX-CAP™*                 | Global Power Resource™                         | Programmable Active Droop™  | TinyBoost™  |
| BitSiC™                  | GreenBridge™                                   | QFET®   | TinyBuck™   |
| Build it Now™            | Green FPS™                                     | QS™   | TinyCalc™   |
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| EfficientMax™            | MicroFET™                                      | SPM®  | μSerDes™  |
| ESBC™                    | MicroPak™                                      | STEALTH™  |  |
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| FETBench™                |  |   |   |
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