

Vishay General Semiconductor

| ELECTRICAL CHAR | ACTERIS | TICS (T _A = 25 °C | C unless o | therwi | se not | ed) | | | | | | | | | | |
|-------------------------------|---|-------------------------------------|------------------|--------------------|--------|-----|-----|----|----|----|------|--|--|--|--|--|
| PARAMETER | | TEST | SYMBOL | GBPC12, 15, 25, 35 | | | | | | | | | | | | |
| PARAMETER | ARAMETER | | STMDUL | 005 | 01 | 02 | 04 | 06 | 08 | 10 | UNIT | | | | | |
| | GBPC12 | I _F = 6.0 A | - V _F | | | | | | | | | | | | | |
| Maximum instantaneous | GBPC15 | I _F = 7.5 A | | | | | 1.1 | | | | v | | | | | |
| forward drop per diode | GBPC25 | I _F = 12.5 A | | 1.1 | | | | | | v | | | | | | |
| | GBPC35 | I _F = 17.5 A | | | | | | | | | | | | | | |
| Maximum reverse DC curre | nt at rated | T _A = 25 °C 5.0 | | | | | | | | | | | | | | |
| DC blocking voltage per diode | | T _A = 125 °C | IR | 500 | | | | | | μA | | | | | | |
| Typical junction capacitance | n capacitance per diode 4 V, 1 MHz C _J 300 | | | pF | | | | | | | | | | | | |

| THERMAL CHARACTERIS | STICS (T _A = 25 °C ur | nless othe | rwise r | noted) | | | | | | |
|----------------------------|---|---------------------------------|--------------------|--------|----|-----|----|----|------|------|
| PABAMETER | | SYMBOL | GBPC12, 15, 25, 35 | | | | | | UNIT | |
| PARAMETER | | STINIDUL | 005 01 02 0 | | 04 | 06 | 08 | 10 | | |
| Typical thermal resistance | GBPC12 to GBPC25 | R _{eJC} ⁽¹⁾ | | | | 1.9 | | | | °C/W |
| Typical thermal resistance | GBPC35 | LIBIC () | 1.4 | | | | | | | 0/11 |

Notes

(1) With heatsink

⁽²⁾ Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with #10 screw

| ORDERING INFORMATION (Example) | | | | | | | |
|--------------------------------|-----------------|------------------------|---------------|---------------|--|--|--|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE | | | |
| GBPC1206-E4/51 | 15.79 | 51 | 100 | Paper box | | | |
| GBPC1506-E4/51 | 15.79 | 51 | 100 | Paper box | | | |
| GBPC2506-E4/51 | 15.79 | 51 | 100 | Paper box | | | |
| GBPC3506-E4/51 | 15.79 | 51 | 100 | Paper box | | | |
| GBPC1206W-E4/51 | 13.8 | 51 | 100 | Paper box | | | |
| GBPC1506W-E4/51 | 13.8 | 51 | 100 | Paper box | | | |
| GBPC2506W-E4/51 | 13.8 | 51 | 100 | Paper box | | | |
| GBPC3506W-E4/51 | 13.8 | 51 | 100 | Paper box | | | |



GBPC12, GBPC15, GBPC25, GBPC35

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RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

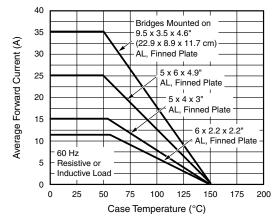


Fig. 1 - Maximum Output Rectified Current

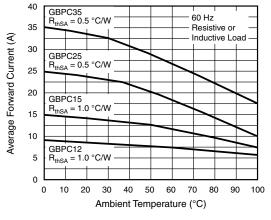


Fig. 2 - Maximum Output Rectified Current

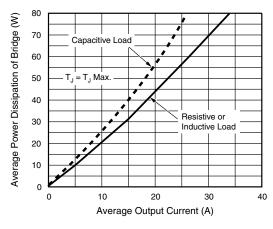


Fig. 3 - Maximum Power Dissipation

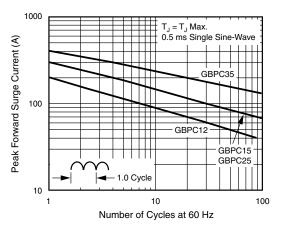


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

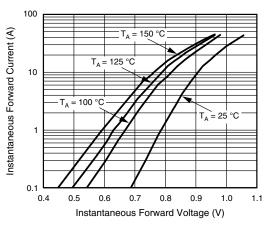


Fig. 5 - Typical Instantaneous Forward Characteristics Per Diode

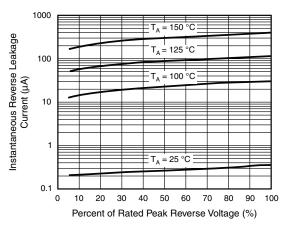


Fig. 6 - Typical Reverse Leakage Characteristics Per Diode

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GBPC12, GBPC15, GBPC25, GBPC35

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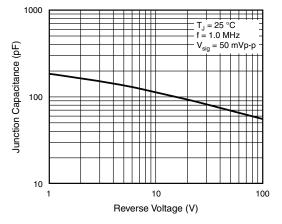


Fig. 7 - Typical Junction Capacitance Per Diode

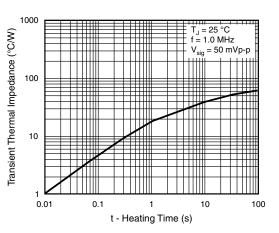
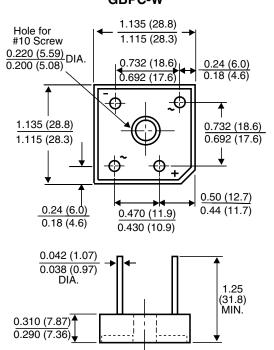
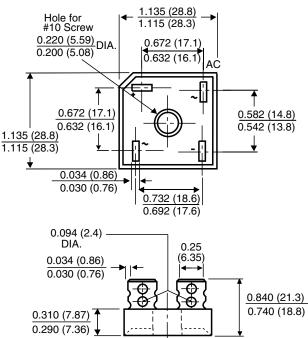


Fig. 8 - Typical Transient Thermal Impedance Per Diode







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GBPC-W

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