

CURRENT 35.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

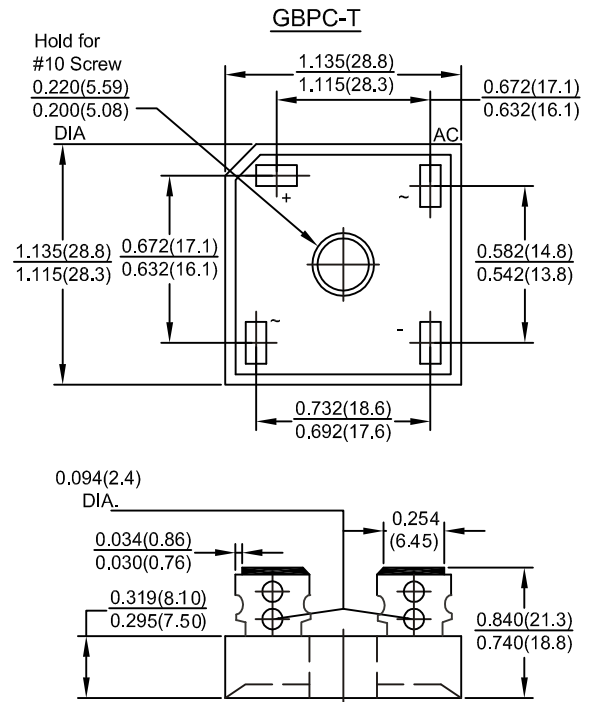
GBPC3501 THRU GBPC3510

Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Integrally molded heat sink provide low thermal resistance for max. heat dissipation
- High surge current capability
- Void-free junction soldering by using vacuum soldering
- Universal 3-way terminals : snap on, wire-around, or P.C. board mounting
- High temperature soldering guaranteed : 260° C/10 seconds at 5lbs. (2.3kg)tension
- AI plate plastic case

Mechanical Data

Case : Molded plastic with heat-sink integrally mounted in the bridge encapsulation
 Terminals : Either nickel plated 0.25". Faston lugs or copper leads 0.040" diameter sufficient letter "W" added to indicate leads
 Polarity : Polarity symbols marked on body
 Mounting Position : Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface
 Weight : 15 grams or 0.53 ounce
 Mounting Torque : 20 in.-lb. max



Dimensions in Inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

| Characteristic | Symbol | GBPC | | | | | | | | Units |
|--|-----------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|--------------------|
| | | 35005 | 3501 | 3502 | 3504 | 3506 | 3508 | 3510 | | |
| | Marking | GBPC 35005 | GBPC 3501 | GBPC 3502 | GBPC 3504 | GBPC 3506 | GBPC 3508 | GBPC 3510 | | |
| Maximum recurrent peak reverse voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum RMS voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts | |
| Maximum DC blocking voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum average forward rectified current at TC=50 °C | I _O | 35.0 | | | | | | | | Amps |
| Peak forward surge current, single sine-wave on rated load(JEDEC Method) | I _{FSM} | 400.0 | | | | | | | | Amps |
| Rating for fusing(1ms<tm<8.3ms) | I ² t | 660.0 | | | | | | | | A ² sec |
| Maximum instantaneous forward voltage drop per leg at 17.50 A | V _F | 1.1 | | | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage per leg | I _R | 5.0 500 | | | | | | | | μ A |
| RMS isolated voltage from case to leads | V _{ISO} | 2500 | | | | | | | | Volts |
| Typical junction capacitance | C _j | 300 | | | | | | | | pF |
| Typical thermal resistance | R _{th-JC} | 1.4 | | | | | | | | ° C/W |
| Operating junction and storage temperature range | T _j , T _{stg} | -55 to +150 | | | | | | | | ° C |

Notes : 1. Measured 1MHz and applied reverse voltage of 4.0V DC

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Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

FIG.1-MAXIMUM OUTPUT RECTIFIED CURRENT

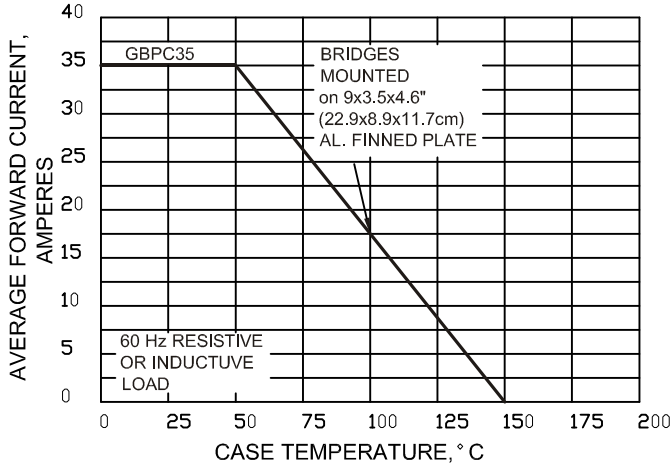


FIG.2-MAXIMUM OUTPUT RECTIFIED CURRENT

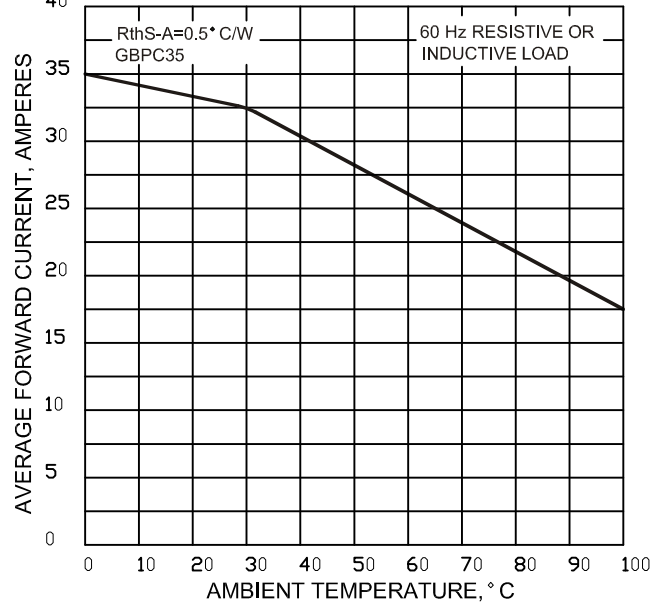


FIG.3-MAXIMUM POWER DISSIPATION

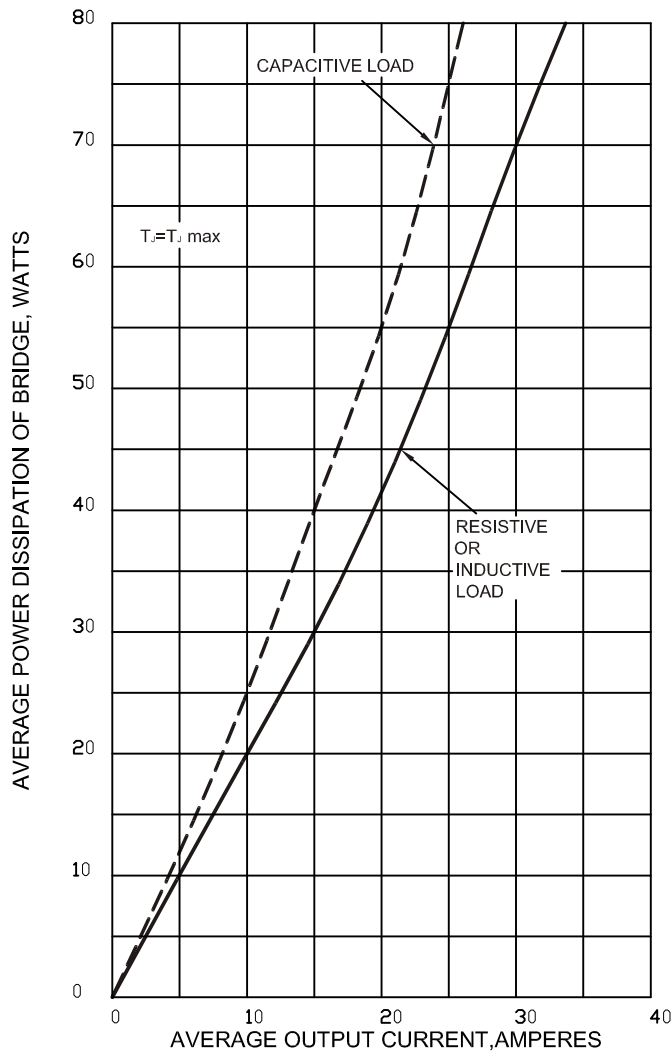
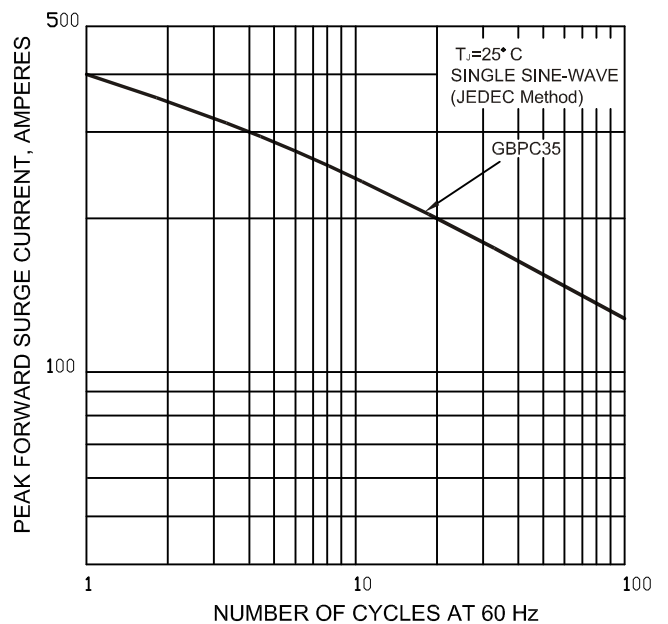


FIG.4-MAXIMUM NON-REPEITIVE PEAK FORWARD



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