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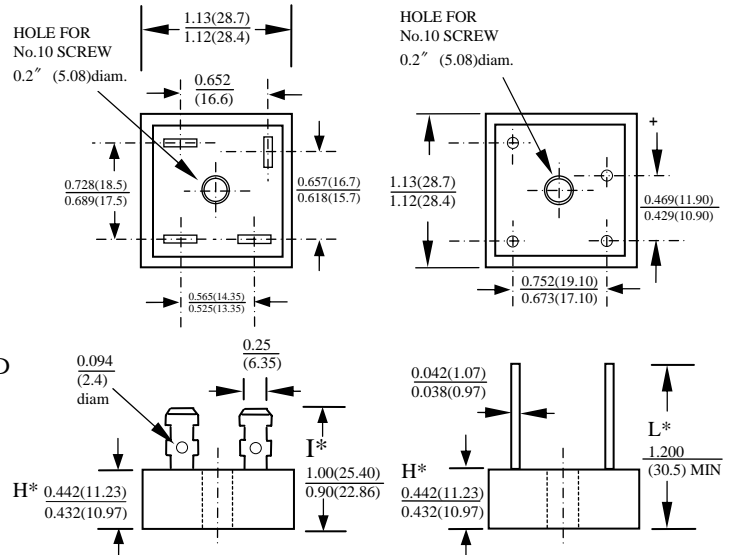
## 35A HIGH CURRENT SILICON BRIDGE RECTIFIERS BP35-005G THRU BP35-10G

### FEATURES

- CURRENT RATING 35A
- REVERSE VOLTAGE RATING UP TO 1000V
- TYPICAL IR LESS THAN 1μA
- HIGH TEMPERATURE SOLDERING GUARANTEED  
260°C /10 SECOND
- GLASS PASSIVATED CHIP JUNCTION

### MECHANICAL DATA

- CASE: METAL HEAT SINK CASE, ELECTRICALLY INSULATED
- TERMINALS: UNIVERSAL .25 (6.3mm) FAST ON DIMENSIONS IN INCHES AND (MILLIMETERS)
- MOUNTING METHOD: BOLT DOWN ON HEAT SINK WITH SILICON THERMAL COMPOUND BETWEEN BRIDGE AND MOUNTING SURFACE FOR MAXIMUM HEAT TRANSFER EFFICIENCY
- WEIGHT: 20 GRAMS



| DIM | MIN         | MAX         | REMARK               |
|-----|-------------|-------------|----------------------|
| H*  | 0.295(7.5)  | 0.311(7.9)  | SUFFIX "S" THIN CASE |
| I*  | 0.74(18.80) | 0.84(21.30) | SUFFIX "S" THIN CASE |
| L*  | 1.09(27.89) | -           | SUFFIX "S" THIN CASE |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS, RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

| RATINGS  | SYMBOL           | BP35<br>-005G | BP35<br>-01G | BP35<br>-02G | BP35<br>-04G | BP35<br>-06G | BP35<br>-08G | BP35<br>-10G | UNITS |
|--|------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|
| MAXIMUM RECURRENT PEAK REVERSE VOLTAGE                                 | V <sub>RRM</sub> | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V     |
| MAXIMUM RMS VOLTAGE  | V <sub>RMS</sub> | 35            | 70           | 140          | 280          | 420          | 560          | 700          | V     |
| MAXIMUM DC BLOCKING VOLTAGE  | V <sub>DC</sub>  | 50            | 100          | 200          | 400          | 600          | 800          | 1000         | V     |
| MAXIMUM AVERAGE FORWARD RECTIFIED OUTPUT CURRENT AT TC=55°C            | I <sub>O</sub>   | 35.0          |              |              |              |              |              |              | A     |
| PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD | I <sub>FSM</sub> | 400           |              |              |              |              |              |              | A     |
| STORAGE TEMPERATURE RANGE  | T <sub>STG</sub> | - 55 TO + 175 |              |              |              |              |              |              | °C    |
| OPERATING TEMPERATURE RANGE  | T <sub>OP</sub>  | - 55 TO + 175 |              |              |              |              |              |              | °C    |

### ELECTRICAL CHARACTERISTICS (A<sub>T</sub> T<sub>A</sub> =25°C UNLESS OTHERWISE NOTED)

| CHARACTERISTICS   | SYMBOL         | BP35<br>-005G | BP35<br>-01G | BP35<br>-02G | BP35<br>-04G | BP35<br>-06G | BP35<br>-08G | BP35<br>-10G | UNITS |
|---|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|
| MAXIMUM INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT AT SPECIFIED CURRENT | V <sub>F</sub> | 1.1           |              |              |              |              |              |              | V     |
| MAXIMUM REVERSE DC CURRENT AT RATE DC BLOCKING VOLTAGE PER ELEMENT            | I <sub>R</sub> | 10            |              |              |              |              |              |              | μA    |

NOTE: Suffix No. Versus Different Cases And Terminals

| TERMINAL                  | CASE      |                   |                 |                                   |                                 |
|---------------------------|-----------|-------------------|-----------------|-----------------------------------|---------------------------------|
|                           | SUFFIX No | NORMAL METAL CASE | THIN METAL CASE | NORMAL PLASTIC CASE ALUMINUM BASE | THIN PLASTIC CASE ALUMINUM BASE |
| FAST ON TERMINALS         |           | NO SUFFIX         | S               | P                                 | PS                              |
| WIRE LEAD TERMINALS       |           | W                 | WS              | PW                                | PWS                             |
| IN LINE PIN CONFIGURATION |           | -                 | -               | L                                 | LS                              |

# RATINGS AND CHARACTERISTIC CURVES BP35-005G THRU BP35-10G

FIG. 1 - MAXIMUM OUTPUT RECTIFIED CURRENT

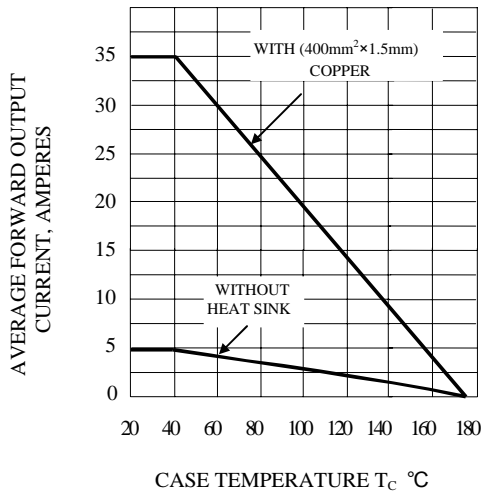


FIG. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

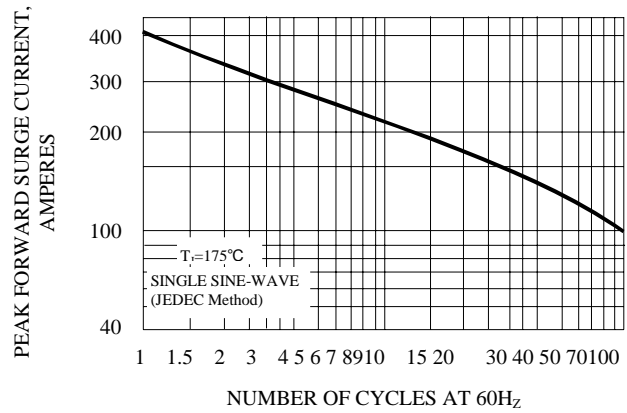


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS AT  $T_j=25^\circ\text{C}$

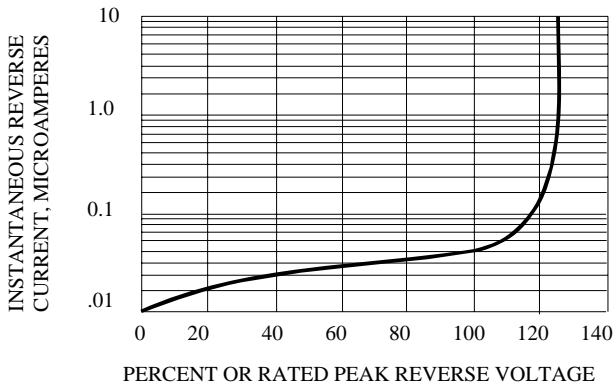


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

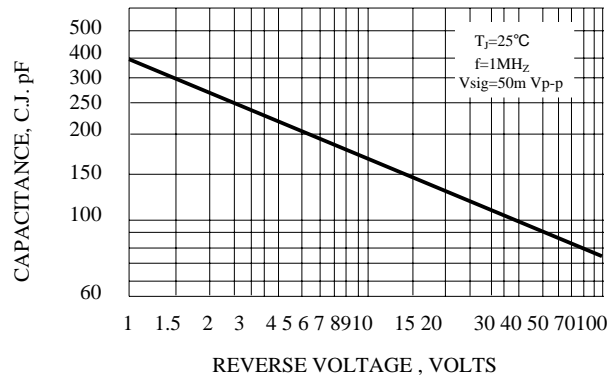


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

