Tech Notes

Title: Testing Triac Resistances
Created: 13.July.2012
Last Revised:

Applies To: Baths, Micro Baths, and Dry Well Calibrators

Problem Description:

Failure of the Triac can cause heating circuits to behave abnormally.

Resolution/Work Around:

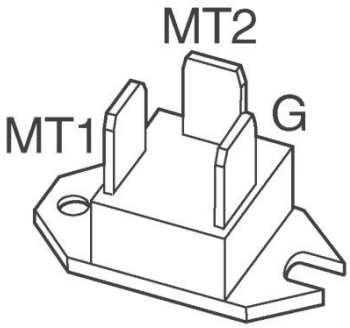
To determine if a Triac is operating correctly, do the following:

1. Disconnect the instrument from its power source.
2. Locate the Triac.
3. Mark and then disconnect the lead wires connected to the Triac.
4. Using an Ohmmeter check the terminal-to-terminal resistance as shown in Table 1.
5. If any of the resistance values are outside of the guidelines shown in Table 1, the Triac should be replaced.
6. If the resistance values are within the guidelines or after the Triac has been replaced, reconnect the lead wires to their correct terminals.

Table 1: General Resistance Guideline

40Ω < G to MT1 < 100 Ω
MT1 to MT2 > 20 MΩ
MT2 to G > 20 MΩ

NOTE: Resistances listed in Table 1 are not absolute and should only be used as a troubleshooting guideline. Reversing polarity of the measurement will change measured results. Measure + to -, for example positive lead on G and negative lead on MT1.



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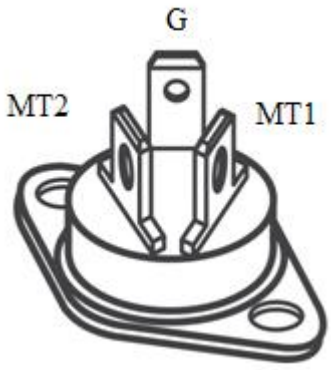

BTA25-600BW

Other Information:

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