

applied to the cell voltage sensor when high current is demanded from the system.

The load current regulator operates by sampling the current sustained by inductor L2 through the "free-wheeling" leg of the circuit for a short period of time after Q1 turns off; the current is sampled by turning on transistor Q2 which permits the load current to flow through the primary winding of the pulse transformer. The parameters of the transformer and its secondary load are chosen such that an insignificant portion of the load current flows through diode CR during the sample time. When transistor Q2 is turned off, the load current flows through diode CR until Q1 is turned on again.

This load sensor circuit can also be used as a current limiter or for short-circuit current protection.

Note:

Requests for further information may be directed to:

Technology Utilization Officer
Goddard Space Flight Center
Greenbelt, Maryland 20771
Reference: TSP69-10578

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

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