

SG29055/SG29055A

LOW DROPOUT DUAL REGULATOR

PRODUCTION DATA SHEET

THE INFINITE POWER OF INNOVATION

DESCRIPTION

The SG29055/SG29055A is a dual 5V/ 5V positive voltage regulator. One output is a high current (up to 1000mA) regulator that can be turned on or off by a high impedance low current TTL compatible switch. The second or standby output remains on regardless. The on/off switch not only shuts off the high current output, but actually puts the IC in a micropower mode making possible a low quiescent current. This unique characteristic coupled with an extremely low dropout, (0.55V for output current of 10mA) makes the SG29055/SG29055A well suited for power systems that require standby memory. The SG29055/SG29055A includes other features which were originally designed for automotive applications. These include protection from reverse battery installations and

double battery jumps. The high current regulator has overvoltage shutdown to protect both the internal circuitry and the load during line transients, such as load dump (60V). In addition, the high current regulator design also has built-in protection for short circuit and thermal overload. During these fault conditions of the primary regulator the standby regulator will continue to power its load.

The SG29055 is the 5 volt, ±5% version of a family of dual regulators with a standby output voltage of 5V. Other high current outputs of 8.2V and 12V are available. Also available is the SG29055A which offers an improved output voltage tolerance of ±2%. They are available in the plastic TO-220 power package and are designed to function over the automotive ambient temperature range of -40° to 85°C.

KEY FEATURES

- 2% INTERNALLY TRIMMED OUTPUT
- TWO REGULATED OUTPUTS
- OUTPUT CURRENT IN EXCESS OF 1000mA
- LOW QUIESCENT CURRENT STANDBY REGULATOR
- INPUT-OUTPUT DIFFERENTIAL LESS THAN 0.6V AT 0.5A
- REVERSE BATTERY PROTECTION
- 60V LOAD DUMP PROTECTION
- -50V REVERSE TRANSIENT PROTECTION
- SHORT CIRCUIT PROTECTION
- INTERNAL THERMAL OVERLOAD
 PROTECTION
- ON/OFF SWITCH FOR HIGH CURRENT OUTPUT

COMPLETE SPECIFICATIONS AVAILABLE FROM "LIN" FAX SYSTEM (SEE PAGE 4-1) AND 1990/91 SILICON GENERAL DATABOOK

STANDBY OUTPUT ON/OFF SWITCH GROUND Vour VN

