

DESCRIPTION

The EV62055EJ-00A is an evaluation board for MP62055EJ, single-channel, current-limited, power-distribution switch.

The EVB operates over a 2.7V to 5.5V range and provides a continuous output current of up to 0.5A. It is available with guaranteed current limits, making it ideal for load switching applications. When the output load exceeds the current-limit threshold or a short is present, the device limits the output current to a safe level by switching into a constant-current mode.

This device, available in a SOT23 package, provides a very compact system solution with minimal reliance on external components.

ELECTRICAL SPECIFICATIONS

| Parameter | Symbol | Value | Units |
|----------------|------------------|----------|-------|
| Input Voltage | V _{IN} | 2.7– 5.5 | V |
| Output Voltage | V _{OUT} | 2.7-5.5 | V |
| Output Current | I _{OUT} | 0.5 | A |

FEATURES

- Single Channel
- Accurate Current Limit
- 2.7V to 5.5V Supply Range
- Under-Voltage Lockout
- EN Active High
- Flag indicate when over-current, output short encountered.

APPLICATIONS

- Smart phone and PDA
- Portable GPS Device
- Notebook PC
- Set-top-box
- Telecom and Network Systems
- PC Card Hot Swap
- USB Power Distribution

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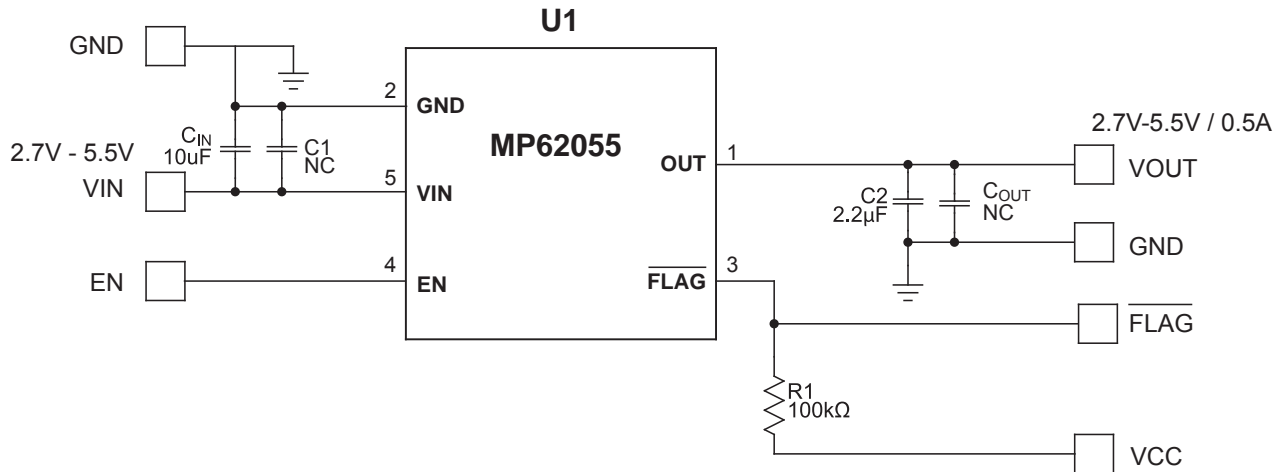
EVALUATION BOARD



(L x W x H) 2.0" x 1.2" x 0.5"
(5.0cm x 3cm x 1.2cm)

| Board Number | MPS IC Number |
|---------------|---------------|
| EV62055EJ-00A | MP62055EJ |

EVALUATION BOARD SCHEMATIC



EVALUATION BOARD SCHEMATIC BILL OF MATERIALS

| Qty | Ref | Value | Description | Package | Manufacturer | Manufacturer P/N |
|-----|----------|-------|------------------------|---------|--------------|--------------------|
| 1 | CIN | 10uF | Ceramic Cap, 16V, X7R | 1206 | Murata | GRM31CR71C106KAC7L |
| 1 | C2 | 2.2uF | Ceramic Cap., 16V, X5R | 0805 | TDK | C2012X5R1A225K |
| 2 | C1, COUT | NC | | | | |
| 1 | R1 | 100kΩ | Film Res., 5% | 0805 | Any | |
| 1 | U1 | | | SOT23-5 | MPS | MP62055EJ |

PRINTED CIRCUIT BOARD LAYOUT

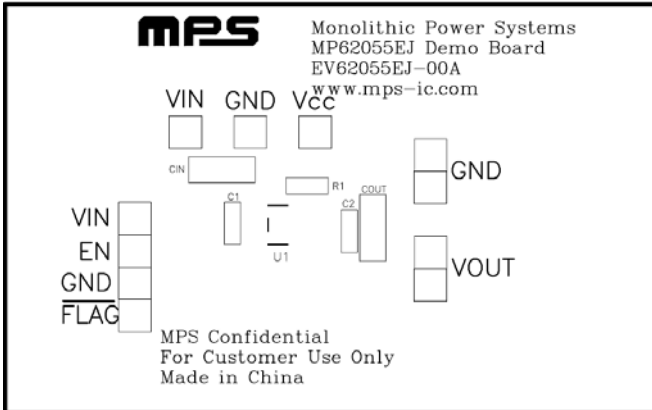


Figure 1—Top Silk Layer

Figure 2—Top Layer

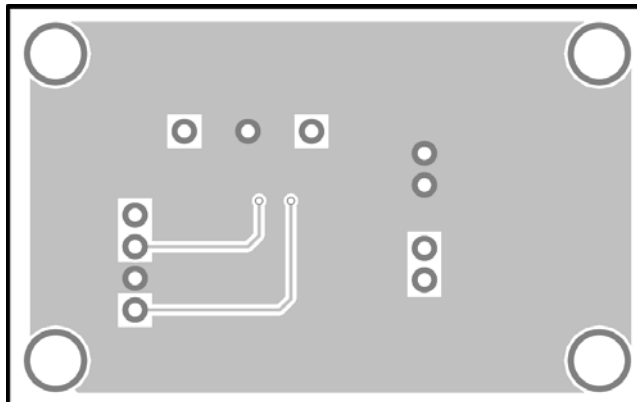


Figure 3—Bottom Layer

QUICK START GUIDE

1. Connect the positive and negative terminals of the load to the VOUT and GND pins, respectively.
2. Preset the power supply output to between 2.7V and 5.5V, then turn off the power supply.
3. Connect the positive and negative terminals of the power supply output to the VIN and GND pins, respectively.
4. Turn the power supply on. The board will automatically startup.
5. To use the Enable function, apply an input to the EN pin. Drive EN higher than 2V to turn on the regulator or less than 0.4V to turn it off.
6. To use flag indicator, apply a 5V voltage to V_{CC} pin.

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