

## MIC94083YFT-TR

Data Sheet

Power Load Distribution Switch IC, Active High, 1 Output,  $5.5~\mathrm{V}$  in,  $2~\mathrm{A}$ ,  $0.067~\mathrm{ohm}$ , TMLF-4

Manufacturers <u>Microchip Technology</u>, Inc

Package/Case UDFN-4

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for MIC94083YFT-TR or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The MIC94080/1/2/3/4/5 is a family of high-side load switches designed to operate from 1.7V to 5.5V input voltage. The load switch pass element is an internal  $67m\Omega$  RDSON P-Channel MOSFET which enables the device to support up to 2A of continuous current.

The MIC94080 and MIC94081 feature rapid turn on. The MIC94082 and MIC94083 provide a slew rate controlled soft-start turn-on of 850µs, while the MIC94084 and MIC94085 provide a slew rate controlled soft-start turn-on of 120µs. The soft-start feature is provided to prevent an inrush current event from pulling down the input supply voltage.

The MIC94081, MIC94083, and MIC94085 feature an active load discharge circuit which switches in a  $250\Omega$  load when the switch is disabled to automatically discharge a capacitive load.

An active pull-down on the enable input keeps the MIC94080/1/2/3/4/5 in a default OFF state until the enable pin is pulled above 1.25V. Internal level shift circuitry allows low voltage logic signals to switch higher supply voltages. The enable voltage can be as high as 5.5V and is not limited by the input voltage.

The MIC94080/1/2/3/4/5 operating voltage range makes them ideal for Lithium ion and NiMH/NiCad/Alkaline battery powered systems, as well as non-battery powered applications. The devices provide low quiescent current and low shutdown current to maximize battery life.

## **Features**

1.7V to 5.5V input voltage range

2A continuous operating current

67mΩ RDSON

Internal level shift for CMOS/TTL control logic

Ultra low quiescent current

Micro-power shutdown current

Soft-Start: MIC94082/3 (800µs), MIC94084/5 (120µs)

Load discharge circuit: MIC94081, MIC94083, MIC94085

Ultra fast turn off time

Junction operating temperature from -40  $^{\circ}$ C to +125  $^{\circ}$ C

## **Related Products**



MIC94325YMT-TR

Microchip Technology, Inc UDFN-6



**MIC2009A-1YM6-TR** 

Microchip Technology, Inc SOT-23-6



MIC5841YWM-TR

Microchip Technology, Inc SOIC-18



**MIC29152WT** 

Microchip Technology, Inc TO-220-5



**MIC4684YM** 

Microchip Technology, Inc SOIC-8



MIC2090-1YM5-TR

Microchip Technology, Inc SOT-23-5



**MIC5891YN** 

Microchip Technology, Inc PDIP-16



**MIC5209YM** 

Microchip Technology, Inc SOIC-8