

MIC94082YFT-TR

Power Switch Hi Side 1-OUT 2A 0.20hm 4-Pin FTDFN T/R

Manufacturer: Microchip Technology, Inc

Package/Case: TMLF-4

Product Type: Switches

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only



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 in-rush current event from pulling down the input supply voltage.

The MIC94081, MIC94083, and MIC94085 feature an active load discharge circuit which switches in a 250Ω 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.

Key Features

1.7V to 5.5V input voltage range

2A continuous operating current

 $67m\Omega$ RDSON

Internal level shift for CMOS/TTL control logic

Ultra low quiescent current

Micro-power shutdown current

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

Load discharge circuit: MIC94081, MIC94083, MIC94085

Ultra fast turn off time

Junction operating temperature from -40°C to +125°C



Pin Configuration



Recommended For You

MIC4451YN

Microchip Technology, Inc

DIP8

MIC4427YN

Microchip Technology, Inc

DIP8

MIC4427YM

Microchip Technology, Inc

SOP-8

MIC2954-02WS

Microchip Technology, Inc

SOT223

MIC2951-02YM

Microchip Technology, Inc

SOP-8

MIC4452ZT

Microchip Technology, Inc

TO-220-5

MIC5013YN

Microchip Technology, Inc

PDIP-8

MIC4123YME

Microchip Technology, Inc

SOP-8

MIC49150WR

Microchip Technology, Inc

SPAK-5

MIC2582-MYM

Microchip Technology, Inc

SOP-8

MIC2951-02YM-TR

Microchip Technology, Inc

SOIC-8

MIC2506YM

Microchip Technology, Inc

SOP-8

MIC4224YM

Microchip Technology, Inc

SOP8

MIC4422ZM

Microchip Technology, Inc

SOP8

MIC49300WR

Microchip Technology, Inc

S-PAK-5