

MIC94090YC6-TR

Data Sheet

IC LOAD SW HGH SIDE 1.2A SC70-6

Manufacturers	Microchip Technology, Inc		
Package/Case	SC70-6		
Product Type	Power Management ICs		
RoHS			
Lifecycle	Images	are for reference only	
Please submit RFQ for MIC94090YC6-TR or Email to us: sales@ovaga.com We will contact you in 12 hours.			RFQ

General Description

The MIC94090/1/2/3/4/5 is a family of high-side load switches designed for operation from 1.7V to 5.5V input voltage. The load switch pass element is an internal 130m Ω RDS(ON) P-channel MOSFET which enables the device to support up to 1.2A continuous current. Additionally, the load switch supports 1.5V logic level control and shutdown features.

The MIC94090 and MIC94091 feature rapid turn on. The MIC94092 and MIC94093 provide a slew rate controlled soft-start turn-on of 790µs, while the MIC94094 and MIC94095 provide a slew rate controlled soft-start turn-on of 120µs. The soft-start feature option prevents an in-rush current event from pulling down the input supply voltage.

The MIC94091, MIC94093, and MIC94095 include a 250Ω auto discharge load circuit that is switched on when the load switch is disabled.

An active pull-down on the enable input keeps the MIC94090/1/2/3/4/5 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 MIC94090/1/2/3/4/5 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

1.2A continuous operating current

 $130m\Omega R DS(ON)$

Internal level shift for CMOS/TTL control logic

Ultra low quiescent current

Micro-power shutdown current

Rapid turn-on: MIC94090/1

Soft-Start: MIC94092/3 (790µs), MIC94094/5 (120µs)

Load discharge circuit: MIC94091/3/5

Industry standard SC-70-6 package

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



<u>MIC4684YM</u>

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



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