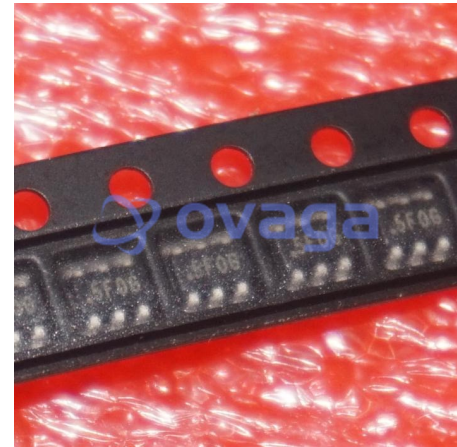


Digital Green-Mode Synchronous Rectifier Controller

Manufacturers	Renesas Technology Corp
Package/Case	SOT23-6
Product Type	Transistors
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for iW673-00 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

High performance synchronous rectifier for compact AC/DC adapters

Combined with the MOSFET, the iW673 can emulate the diode rectifier at the secondary side of the flyback to reduce conduction loss. The iW673 determines the timing of the driver by sensing the voltage across the RDS(ON) to achieve lossless sensing. The iW673 uses proprietary digital adaptive turn-off control technology to minimize the turn-off deadtime of the synchronous rectifier so that the parallel Schottky diode required by conventional synchronous rectifiers can be eliminated. The integrated driver has strong driving capability for high efficiency. The operating power consumption of the controller excluding the driver is less than 4mW at no load to achieve the ultra-low no-load power consumption for 5V applications. The iW673 integrates a pulse linear regulator to maintain the operation of the synchronous rectifier at low system output voltage when the system is operating in constant current (CC) mode.

A DiaSIM simulation model is available for the iW673. For more information and where to download, please visit the DiaSIM page.

Application: High Performance Synchronous Rectifier for Compact AC/DC Adapters

Features

Digital adaptive turn-off control minimizes dead-time and eliminates the parallel Schottky diode

Integrated pulse linear regulator (PLR) allows SR operation at low system output voltage down to 2.4V in typical 5V, 2.5A USB charger applications

Wide input operating voltage up to 30V

Optimized 5V MOSFET gate driver

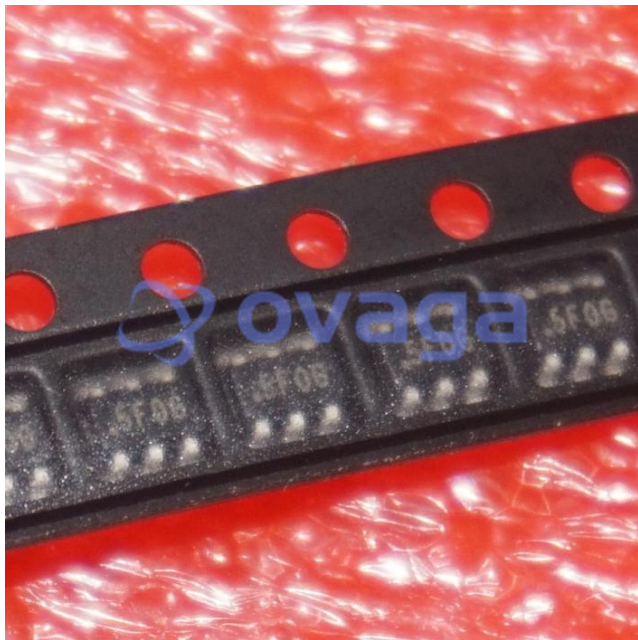
Intelligent low power management achieves ultra-low no-load operating current <0.65mA

Lossless MOSFET VDS sensing for SR timing control

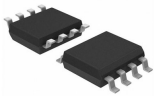
6-pin SOT23 package

Application

Compact AC/DC adapters/chargers for media tablets and smart phones



Related Products



[iW636-00](#)

Renesas Technology Corp
SO-8



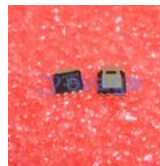
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