

# **TS19320CS**

# Phase-Cut Dimmable Flyback or Buck-Boost Current Control with Active PFC for LED lighting

# SOP-8 Pin De 1. HV 2. RT 3. CS 4. CON

### Pin Definition:

1. HV 8. GND 2. RT 7. OUT 3. CS 6. V<sub>CC</sub> 4. COM 5. DMG

The TS19320CS is a phase-cut (TRIAC) dimmable constant current control IC with active power factor correction isolated or non-isolated AC-DC LED lighting control. The TS19320CS is configurable as an isolated, primary-side-regulated Flyback controller or non-isolated Buck-Boost converter. It is compatible with many types of TRIAC dimmers including leading-edge and trailing-edge. The IC achieves a high power factor and low total harmonic distortion (THD) and guarantees constant current accuracy to <±5% using Boundary Conduction Mode (BCM) operation. The TS19320CS has built-in protection circuits such as gate voltage clamping, over temperature protection by current degeneration, VCC overvoltage protection and system output open/short circuit protection.

#### **Features:**

- Constant current accuracy <±5%</li>
- Flyback or Buck-Boost w/o photocoupler
- Good dimmer compatibility for 120/230VAC Lamps
- Boundary-mode PFC operation
- Built-in active power factor correction
- High voltage (500V) startup circuit
- Open-LED demagnetization (DMG) protection
- VCC over-voltage protection (OVP)
- Over-temperature protection (OTP)
- · Shorted-LED Protection
- Cycle-by-cycle current limit
- Gate drive voltage clamping

#### **Application:**

- LED lighting
- Down lights, Tube lamps, PAR Lamps, Bulbs

## **Comparable Alternative:**

TSC	Package	Diodes	
TS19320CS	SOP-8	AP1694	

# **Package Information:**

Outline (Package)	Reel	Reel Size	Inner Box	Carton	Carton Size	Gross Weight	Packing
	(pcs)	(inch)	(pcs)	(pcs)	(mm)	(kg/ carton)	Code
SOP-8	2,500	13	5,000	25,000	360*355*270	7.6	RLG

Samples of TS19320CS can be ordered on Product Detail page: http://www.taiwansemi.com/en/products/details/TS19320CS

For pricing and more information, please contact TSC sales or authorized distributors worldwide:

www.taiwansemi.com/en/contact