



AC-DC Isolation Design Solution

Provides Total semiconductor components

Part Number	Package	Topology	Dimming	Active PFC	LED Current Range (mA)	LED Power Range	LED Current Accuracy	Additional Features, Notes
TS19310ACX6	SOT-26	Flyback	Triac	Yes	External N-MOS	-	±3%	- Built in phase angle decoding - Boundary conduction mode operation
TS19320CS	SOP-8	Flyback	Triac	Yes	External N-MOS	-	±5%	- Good dimmer compatibility for 120V/230Vac lamps - Fast start-up
TS19340CS14	SOP-14	Buck (Step-down)	Linear 0-10V PWM (0-100%)	-	-	-	±1%	- Secondary side CC/CV Control - Includes 3.3V 5mA LDO
TS19705CX6	SOT-26	Flyback	-	Yes	External N-MOS	-	±1.5%	- Competitive BOM design - Zero current demagnetization sensing
TS19706CS	SOP-8	Flyback	-	-	Internal 650V, 3.8Ω, N-MOS	≤15 W	±3%	- Competitive BOM design - Excellent temperature compensation in both load / line regulation

AC-DC Non-Isolation Design Solution

Part Number	Package	Topology	Dimming	Active PFC	LED Current Range (mA)	LED Power Range	LED Current Accuracy	Additional Features, Notes
TS19310ACX6	SOT-26	Buck-Boost	Triac	Yes	External N-MOS	-	±3%	- Built in phase angle decoding - Boundary conduction mode operation
TS19320CS	SOP-8	Buck-Boost	Triac	Yes	External N-MOS	-	±5%	- Good dimmer compatibility for 120V/230Vac lamps - Fast start-up
TS19705CX6	SOT-26	Buck-Boost	-	Yes	External N-MOS	-	±1.5%	- Competitive BOM design - Zero current demagnetization sensing
TS19706CS	SOP-8	Buck-Boost	-	-	Internal 650V, 3.8Ω, N-MOS	≤15 W	±3%	- Competitive BOM design - Excellent temperature compensation in both load / line regulation
TS19450CS	SOP-8	Buck (Step-down)	Linear/ PWM (0-100%)	-	External N-MOS	-	±10%	- Programmable constant frequency mode or constant OFF time mode operation - Low cost BOM
TS19451CY	SOT-89	Buck (Step-down)	-	-	50 mA Fixed	-	±5%	- Internal 475V N-MOS - Low cost BOM
TS19452CS	SOP-8	Buck (Step-down)	-	-	100 mA Fixed	-	±5%	- Internal 475V N-MOS - Low cost BOM
TS19460CS	SOP-8	Buck (Step-down)	Linear/ PWM (0-100%)	-	External N-MOS	-	±5%	- Programmable OFF time switching - Low cost BOM
TS19721ACS	SOP-8	Buck (Step-down)	-	Yes	Internal 700V, 1.4Ω, N-MOS	≤25 W	±2.5%	- Boundary conduction mode operation - Single stage PFC >95% @ 265VAC
TS19721DCS	SOP-8	Buck (Step-down)	-	Yes	Internal 600V, 4.4Ω, N-MOS	≤15 W	±2.5%	- Boundary conduction mode operation - Single stage PFC >95% @ 265VAC
TS19751ACS	SOP-8	Buck (Step-down)	-	-	Internal 500V, 30Ω, N-MOS	≤9 W	±3%	- Ultra low cost BOM design - Fast start-up
TS19751BCS	SOP-8	Buck (Step-down)	-	-	Internal 650V, 17Ω, N-MOS	≤12 W	±3%	- Ultra low cost BOM design - Fast start-up
TS19730CX6	SOT-26	Buck-Boost	-	Yes	External N-MOS	-	±2.5%	- Low THD, <10% - Low cost BOM

TSC MOSFET Specific Characteristics

HV MOSFET	Package	Vds (V)	Vgs (V)	Rds10V (mΩ) max.
Super Junction	TO-252, TO251, ITO-220	600	30	0.19Ω ~ 1.4Ω
Super Junction	TO-252, TO251, ITO-220	700	30	0.38Ω ~ 1.4Ω
Super Junction	TO-252, TO251, ITO-220	800	30	0.4Ω ~ 1.2Ω
Planar	TO-92, SOT-223, TO-252, TO251, ITO-220(S)	600	30	0.75Ω ~ 10Ω
Planar	TO-252, TO251, ITO-220(S)	650	30	0.9Ω ~ 5Ω
Planar	SOT-223, TO-252, TO251, ITO-220, TO-220	800	30	0.95Ω ~ 21.6Ω
Planar	TO-252, TO251, ITO-220, TO-220	900	30	1.4Ω ~ 5.1Ω