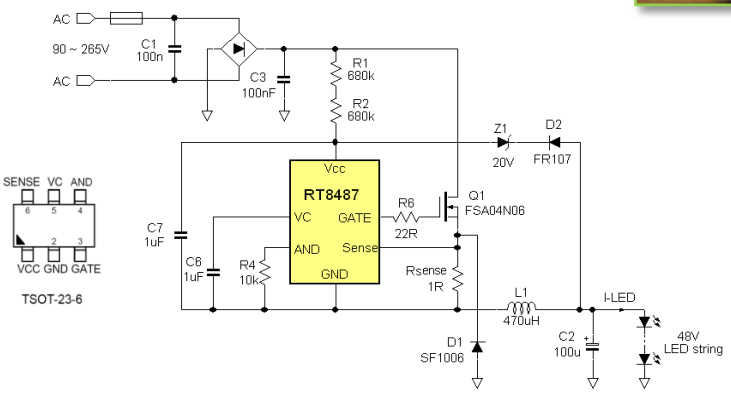
RT8487 / RT8497

AC/DC Non-Isolated BCM Floating Buck LED Driver Controller

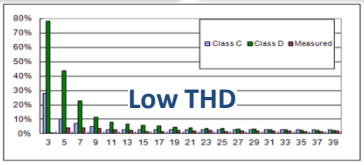
Key Specifications

- Self-biasing Floating Buck with PFC
- True average LED current sensing
- High efficient BCM with resonant tuning
- Transformer-free design
- Low BOM cost and simple design
- Special Low THD algorithm for Buck: Fulfills IEC61000-3-2 Class C
- Buck-Boost configuration also possible

RT8487 for 10W high PF reference design



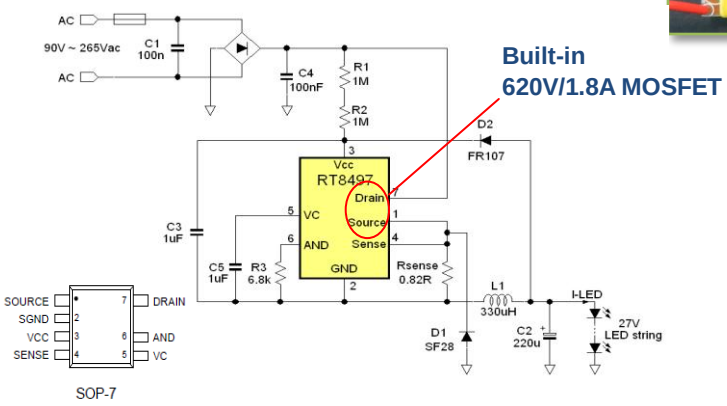
Current regulation over line voltage=0.2%



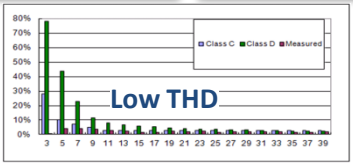
Meets IEC61000-3-2 class C requirements

Vin(V rms)	ILED(mA)	Pout(W)	Efficiency	THD
110	206.4	9.9	90.2%	19.4%
120	206.3	9.9	90.2%	17.7%
230	206.4	9.9	88.7%	13.2%
264	206.7	10.0	88.0%	12.4%

RT8497 for 8W High PF reference design



Current regulation over line voltage =0.5%



Meets IEC61000-3-2 class C requirements

Vin(V rms)	ILED(mA)	Pout(W)	Efficiency	THD
110	292	7.98	85.6%	11%
120	292	7.98	86.3%	10%
230	294	8.11	86.0%	15%
264	395	8.14	85.4%	17%

AC/DC self-biasing floating Buck product family

Product	Description	High Power Factor	Built-in MOSFET	Package
RT8487	self-biasing floating Buck LED driver controller	√		TSOT-23-6
RT8479	self-biasing floating Buck LED driver with built-in 620V/1.8A MOSFET	√	√	SOP-7