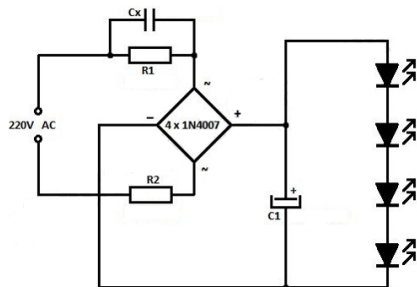


Film Capacitors for LED

Low Cost LED Driver

The capacitive power supply is the economic version of low power LED driver. It has less component count and more efficient for low power LED drivers. The capacitor Cx acts as a voltage dropper.

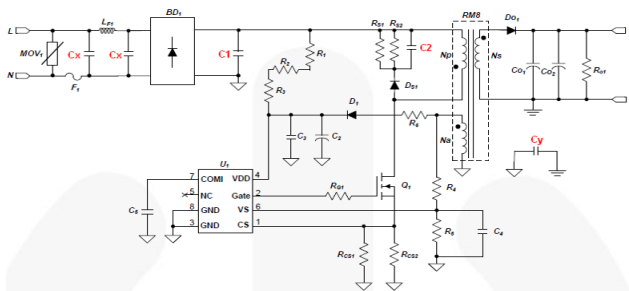


Film capacitor requirement

Cap Function	Type	Voltage Requirement	Cap Range
Cx	Voltage dropping	MPET/MPP-AC/ MPET-F/MPP-F/ MPET-AC (High Reliability)	400/500V DC/ 275/305/310V AC 0.1 to 2.2 μ F

High End LED Driver (Power factor corrected Flyback)

The flyback power supply is the most commonly used high end LED medium power LED driver upto 150W. It consists of the following sections: EMI filter, Input Bridge rectification, PFC and Gate Drive section, Snubber, Power Transformer, Output rectification, Output filter.

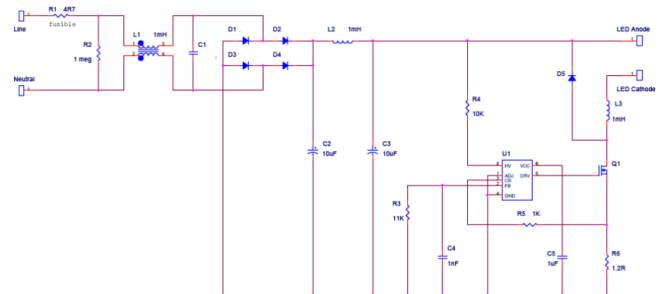


Film capacitor requirement

Cap Function	Type	Voltage Requirement	Cap Range
Cx	EMI Supp- ression	MKP-X2	275/305/310V AC 0.004 to 10 μ F
Cy	EMI Supp- ression	MKP-Y2	250/275V AC 0.001 to 0.1 μ F
C1	Smoothing	MPET/MPP-AC/ MPET-F/MPP-F/ MPP-DC	400/450/500/630V DC 0.1 to 2.2 μ F
C2	Snubber	MPP-DC/ PP-MPP	400/630/1000/ 1250/1600 V DC 0.0022 to 0.47 μ F

High End LED Driver (Buck Power supply)

In case of high end low power applications where very low output voltage is required, buck based (step down) LED driver is employed to handle larger output currents as well.



Cap Function	Type	Voltage Requirement	Cap Range
C1	EMI suppression	MKP-X2	275/305/310V AC 0.004 to 10 μ F

Recommended Capacitors for Applications

Application/ Function	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Voltage dropping	MPP-AC-S	MPET-AC	MPP-AC	MPP-F-AC	MPET-F-AC
Smoothing	MPP-DC	MPP-F	MPET-F	MPET-DC	
Snubbing	PP-MPP	MPP-DC			
Resonance	PP-MPP	MPP-MPP		DPSH	MPP-DC
EMI Suppression Line to Line	IS/MKP-X2	MPP-AC	MPET-AC		
EMI Suppression Line to Ground	IS/MKP-Y2				

Miniature MPP-F Series for LED

Deki has developed a series for LED lights. This series is flame-proof series and fails in the safe mode. The capacitor size is very compact and can easily fit in the LED driver/light.