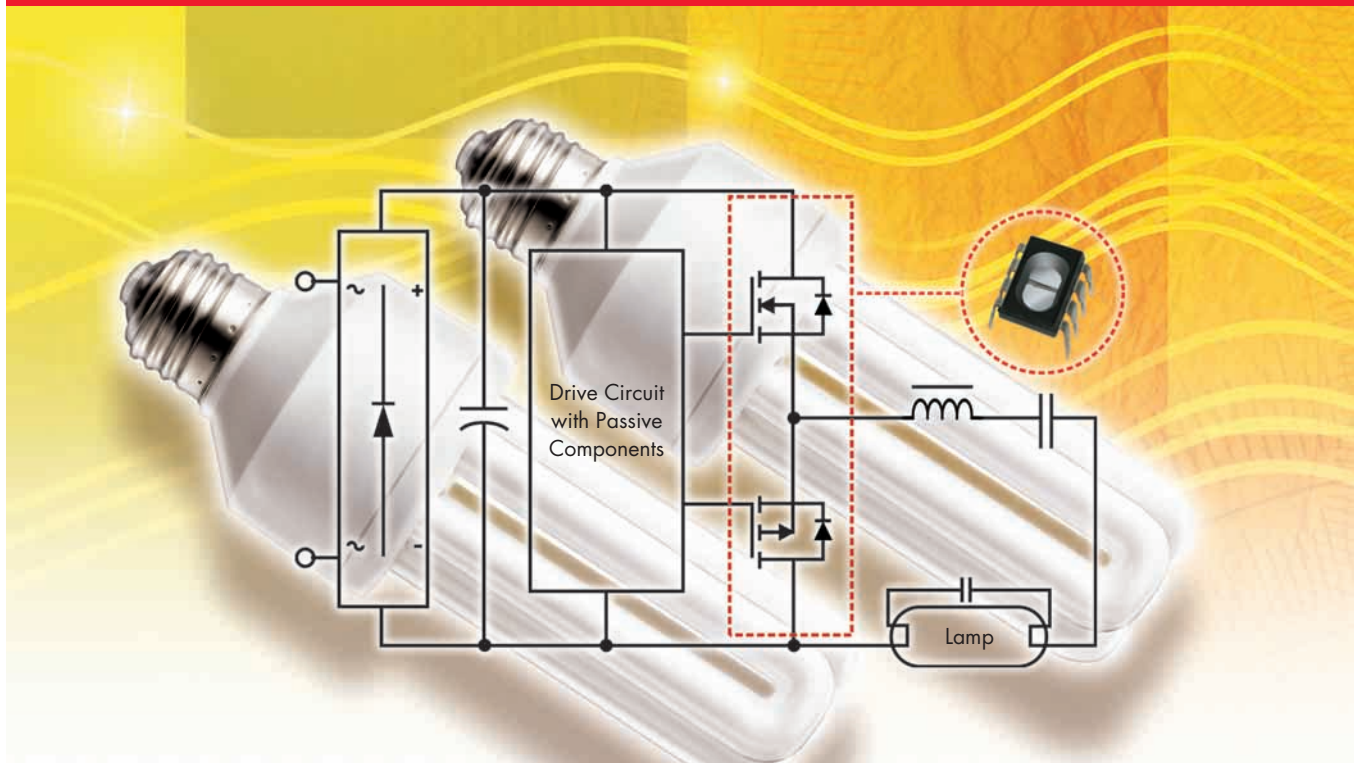


# Power MOSFETs for Compact Ballast Applications



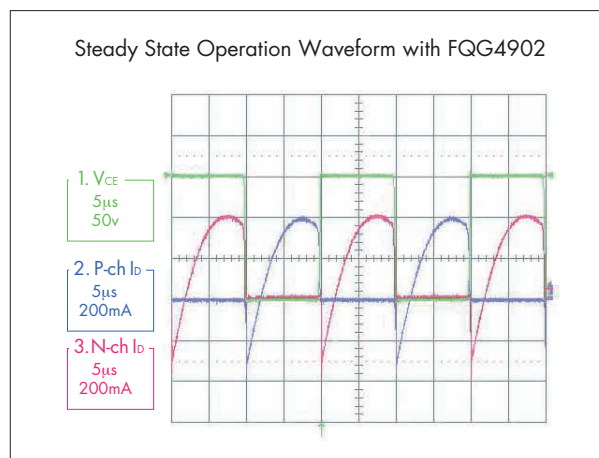
Fairchild's new series of complementary MOSFETs, the FQG4902 and FQG4904 series in DIP-8 package, are ideal for Compact Fluorescent Lamp (CFL) ballast applications. Featuring smaller mounted size, minimized on-resistance, higher pulse energy in the avalanche and commutation modes and higher power dissipation than ever before, these MOSFETs meet power designers' requirements to support enhancing ruggedness characteristics, to reduce power loss and to reduce manufacturing cost.

Fairchild's complementary MOSFET solution offers a simplified driving circuit, with a few passive components, that eliminates the saturable auxiliary transformer. This results in further cost savings and simplified design.

## Advantages

- Fast switching capability suited for high frequency operation
- Reduced board space with DIP-8 package
- Reduced cost by eliminating auxiliary driving transformer

Fairchild's solution leads the compact ballast industry to higher power density, maximized performance and lower cost compared to standard packages.



Across the board. Around the world.



## New Releases

Device	BV <sub>DSS</sub> [V]	I <sub>D</sub> [A]	R <sub>DS(on),max</sub> [Ω]	Q <sub>g,typ</sub> [nC]	Package	Configuration
FQG4902	250/-250	0.54/-0.54	2.0/2.0	6/12	DIP-8	Complementary Pair N-/P- channel
FQG4904	400/-400	0.46/-0.46	3.0/3.0	7.6/20	DIP-8	
FQS4901	400/400	0.45	4.2	7.5/7.5	SOP-8	Dual N-channel
FQS4903	500/500	0.37	4.7	8.2/8.2	SOP-8	
FQNL1N50B	500	0.27	9.0	4.0	TO-92L	Single N-channel
FQNL2N50B	500	0.35	5.3	6.0	TO-92L	
IRFNL214B	250	0.5	2.0	8.1	TO-92L	

## Standard Products

Device	BV <sub>DSS</sub> [V]	I <sub>D</sub> [A]	R <sub>DS(on),max</sub> [Ω]	Q <sub>g,typ</sub> [nC]	Package	Configuration
IRFU410B	500	0.9	10	5.1	I-PAK	Single N-channel
SSR/U1N50B	500	1.3	5.5	8.3	D/I-PAK	
IRFR/U420B	500	2.3	2.6	14	D/I-PAK	
IRFR/U210B	200	2.7	1.5	7.2	D/I-PAK	
IRFR/U220B	200	4.6	0.8	12	D/I-PAK	
IRFR/U230B	200	7.5	0.4	22	D/I-PAK	
IRFR/U214B	250	2.2	2.0	8.1	D/I-PAK	
IRFR/U224B	250	3.8	1.1	13.5	D/I-PAK	
IRFR/U234B	250	6.6	0.45	29	D/I-PAK	
IRFR/U310B	400	1.7	3.4	7.7	D/I-PAK	
SFR/U9210	-200	-1.6	3.0	9	D/I-PAK	Single P-channel
SFR/U9220	-200	-3.1	1.5	15	D/I-PAK	
SFR/U9230B	-200	-5.4	0.8	29	D/I-PAK	
SFR/U9214	-250	-1.5	4.0	9	D/I-PAK	
SFR/U9224	-250	-2.5	2.4	16	D/I-PAK	
SFR/U9310	-400	-1.5	8.0	17	D/I-PAK	



The following are registered and unregistered trademarks Fairchild Semiconductor owns or is authorized to use and is not intended to be an exhaustive list of all such trademarks: ACEx™, Bottomless™, CoolFET™, CROSSVOLT™, DenseTrench™, DOME™, EcoSPARK™, E<sup>2</sup>C MOS™, EnSigna™, FACT™, FACT Quiet Series™, FAST®, FASTr™, FRFET™, GlobalOptoisolator™, GTO™, HiSe™, ISOPLANAR™, LittleFET™, MicroFET™, MicroPak™, MICROWIRE™, OPTOLOGIC™, OPTOPLANAR™, PACMAN™, POP™, Power247™, PowerTrench®, QFET™, QS™, QT Optoelectronics™, Quiet Series™, SILENT SWITCHER®, SMART START™, STAR\* POWER™, SPM™, Stealth™, SuperSOT™-3, SuperSOT™-6, SuperSOT™-8, SyncFET™, TinyLogic™, TruTranslation™, UHC™, UltraFET®, VCX™

