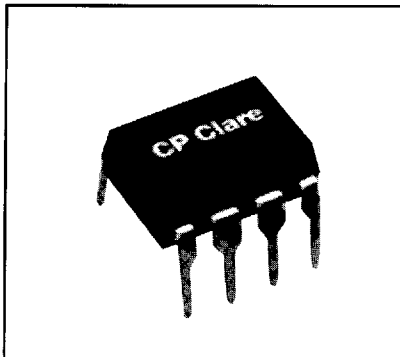


OptoMOS[®] Solid State MOSFET Driver



DESCRIPTION

CP Clare's FDA MOSFET driver couples infrared light emitting diodes with a pair of proprietary photovoltaic integrated circuits. In addition to providing voltage for turn-on of discrete MOSFETs, these patented ICs feature a gate-clamping circuit to provide fast turn-off. The FDA offers a significant reduction in drive circuit complexity, board-space, and cost over alternate techniques for isolated switching of MOSFETs. Used in conjunction with discrete MOSFETs the FDA is ideal for use in programmable controls, process control, instrumentation and telecommunications, replacing TRIAC/drivers, mechanical relays, and bipolar components.

FEATURES

- Optically-Isolated Input to Output
- May be Configured for AC and DC Switching
- 2mA Control Current
- No EMI/RFI Generation
- Machine Insertable, Wave Solderable
- Surface Mount and Tape & Reel Version Available
- Dual Independent, Floating Outputs for Parallel, Series, or Isolated Configuration
- Replacement of Discrete Components
- Solid State Reliability

APPLICATIONS

- MOSFET Driver
- Programmable Control
- Process Control
- Instrumentation
- Replace TRIAC Drivers

RATINGS (@ 25°C)

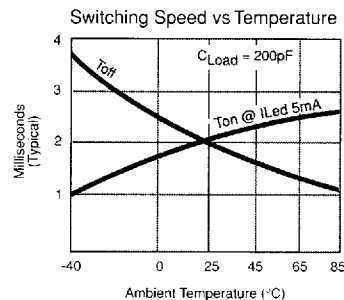
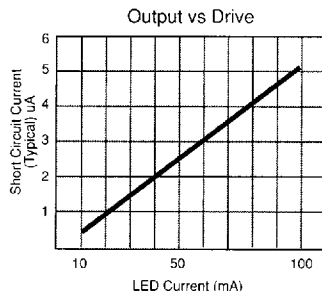
Parameter	Min	Typ	Max	Units
Input Power Dissipation	—	—	150 ¹	mW
Input Control Current	—	—	100	mA
Peak (10mSec)	—	—	1	A
Reverse Input Voltage	—	—	5	V
Power Dissipation	—	—	—	—
Total Package Dissipation	—	—	800 ²	mW
Capacitance	—	—	—	—
Input to Output	—	3	—	pF
Isolation Voltage	—	—	—	—
Input to Output	2500	—	—	V _{RMS}
"E" Suffix (Optional)	3750	—	—	V _{RMS}
Operating Temperature	-40	—	85	°C
Storage Temperature	-40	—	125	°C
Soldering Temperature (10 Seconds Max)	—	—	260	°C

¹ Derate Linearly 1.33 mW/°C.

² Derate Linearly 6.67 mW/°C.

Performance Data

FDA 200



FDA 210

