

## SUPERTEX LED DRIVER INTEGRATED CIRCUITS

◆ Surface Mount Device

### Applications:

- Accent lighting - HV9931, CL2
- Automotive - HV9910, HV9911, HV9930, CL2
- Backlighting of flat panel displays - HV9910
- Battery powered LED lamps - HV9911, HV9930, CL6, CL7
- Cellular phones - HV9903
- Chargers - HV9910
- Color LCD Backlighting - HV9903
- Constant current sink - CL2
- DC/DC or AC/DC LED Driver applications:
  - HV9910, HV9930
  - Digital cameras - HV9903
  - Electronic personal organizers - HV9903
  - General purpose constant current source - HV9910, CL2
  - Industrial lighting - HV9921, HV9922, HV9923, HV9925, CL2, CL6, CL7
  - Incandescent replacements - HV9921, HV9922, HV9923, HV9925, CL6, CL7
- LED driver - HV9903, HV9910, HV9911, HV9921, HV9922, HV9930, CL2
- Low power lighting fixtures - HV9921, HV9922, HV9923, HV9925
- MP3 players - HV9903
- PDAs - HV9903
- RGB backlighting LED driver - HV9910, HV9911, HV9930
- Signage and decorative LED lighting - HV9910, HV9921, HV9922, HV9923, HV9925, HV9931, CL2
- Traffic signals and street lamps - HV9931



MLP-6

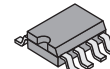
### White LED Driver IC

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. |                | Package | Supply Voltage (V) | Input Voltage (V) | R <sub>SET</sub> (Ω) | Internally Regulated Voltage (V)(Typ) | LED Current (Min/Max) (mA) | Supply Current (mA)(Max) | Price Each |     |     |
|------------------|----------------|---------|--------------------|-------------------|----------------------|---------------------------------------|----------------------------|--------------------------|------------|-----|-----|
| Mfr.             | Mfr. Part No.  |         |                    |                   |                      |                                       |                            |                          | 1          | 100 | 500 |
| ◆                | 689—HV9903K6-G | MLP-6   | 2.6 - 4.6          | 1.8 - 12.5        | 1.5K                 | 3.3                                   | 5.0/40                     | 1.6                      | 1.06       | .88 | .82 |

### Universal High Brightness LED Driver ICs

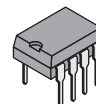
| MOUSER STOCK NO. |                 | Package | Input DC Supply Voltage (V) | Current For Ext. Circuitry (Max)(mA) | Shut-Down Mode Supply Current (Max)(mA) | Internally Regulated Voltage (V)(Typ) | Curr. Sense Pull-in Thresh Voltage (Min/Max)(mV) | Oscillator Frequency (Min/Max)(kHz) | Price Each |     |     |
|------------------|-----------------|---------|-----------------------------|--------------------------------------|---|---------------------------------------|--|-------------------------------------|------------|-----|-----|
| Mfr.             | Mfr. Part No.   |         |                             |                                      |   |                                       |  |                                     | 1          | 100 | 500 |
| ◆                | 689—HV9910BLG-G | SOIC-8  | 8.0 - 450                   | 1                                    | 1                                       | 7.5                                   | 225/275  | 20(1MO)/120(226kΩ)                  | 1.35       | .99 | .95 |



SOIC-8

### Switchmode LED Driver IC w/High Current Accuracy

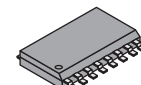
| MOUSER STOCK NO. |                | Package | Input DC Supply Voltage (V) | Current For Ext. Circuitry (Max)(mA) | Shut-Down Mode Supply Current (Max)(mA) | Internally Regulated Voltage (V)(Typ) | Curr. Sense Pull-in Thresh Voltage (Min/Max)(mV) | Oscillator Frequency (Min/Max)(kHz) | Price Each |      |      |
|------------------|----------------|---------|-----------------------------|--------------------------------------|---|---------------------------------------|--|-------------------------------------|------------|------|------|
| Mfr.             | Mfr. Part No.  |         |                             |                                      |   |                                       |  |                                     | 1          | 100  | 500  |
| ◆                | 689—HV9911NG-G | SOIC-16 | 0.5 - 250                   | 1.25                                 | 1.5                                     | 7.75                                  | 12   | 1.225/1.25/1.275                    | 1.58       | 1.31 | 1.21 |



DIP-8

### 3-Pin Switchmode LED Driver ICs

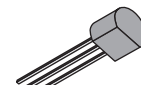
| MOUSER STOCK NO. |                | Package | DC Input Voltage (V) | AC Input Voltage (V) | Constant Output Current (mA) | ON Resistance (Ω) | Operating Supply Current (Typ/Max)(uA) | Threshold Current (Min/Max)(mA) | Price Each |     |     |
|------------------|----------------|---------|----------------------|----------------------|------------------------------|-------------------|--|---------------------------------|------------|-----|-----|
| Mfr.             | Mfr. Part No.  |         |                      |                      |                              |                   |  |                                 | 1          | 100 | 500 |
|                  | 689—HV9921N3-G | TO-92   | 20 - 400             | 85 - 264             | 20.0                         | 210               | 200/350                                | 20.5/25.5                       | .78        | .65 | .60 |
|                  | 689—HV9921N8-G | SOT-89  | 20 - 400             | 85 - 264             | 20.0                         | 210               | 200/350                                | 20.5/25.5                       | .82        | .68 | .63 |
|                  | 689—HV9923N3-G | TO-92   | 20 - 400             | 85 - 264             | 30.0                         | 210               | 200/350                                | 30.8/38.2                       | .80        | .66 | .61 |
|                  | 689—HV9923N8-G | SOT-89  | 20 - 400             | 85 - 264             | 30.0                         | 210               | 200/350                                | 30.8/38.2                       | .84        | .70 | .64 |
|                  | 689—HV9922N3-G | TO-92   | 20 - 400             | 85 - 264             | 50.0                         | 210               | 200/350                                | 52/63                           | .84        | .70 | .64 |
|                  | 689—HV9922N8-G | SOT-89  | 20 - 400             | 85 - 264             | 50.0                         | 210               | 200/350                                | 52/63                           | .87        | .73 | .67 |



SOIC-16

### Programmable-Current LED Lamp Driver IC with PWM Dimming

| MOUSER STOCK NO. |                | Package | DC Input Voltage (V) | AC Input Voltage (V) | Programmable Output Current Max (Ω) | ON Resistance (Ω) | Operating Supply Current (Typ/Max)(uA) | Power Dissipation @ 25°C Max (mW) | Price Each |      |     |
|------------------|----------------|---------|----------------------|----------------------|-------------------------------------|-------------------|--|-----------------------------------|------------|------|-----|
| Mfr.             | Mfr. Part No.  |         |                      |                      |                                     |                   |  |                                   | 1          | 100  | 500 |
| ◆                | 689—HV9925SG-G | SOIC-8  | 20 - 400             | 85 - 264             | 50.0                                | 200               | 300/500                                | 800                               | 1.22       | 1.01 | .93 |



TO-92

### Hysteric Boost-Buck LED Driver ICs

| MOUSER STOCK NO. |                | Package | Input DC Supply Voltage (V) | Current For Ext. Circuitry (Max)(mA) | Shut-Down Mode Supply Current (Max)(mA) | Internally Regulated Voltage (V)(Typ) | PWM Pull-Down Resistance (Min/Max)(kΩ) | Reference Pin Voltage (Min/Typ/Max)(V) | Price Each |      |     |
|------------------|----------------|---------|-----------------------------|--------------------------------------|---|---------------------------------------|--|--|------------|------|-----|
| Mfr.             | Mfr. Part No.  |         |                             |                                      |   |                                       |  |  | 1          | 100  | 500 |
| ◆                | 689—HV9930LG-G | SOIC-8  | 8.0 - 200                   | 1                                    | 1                                       | 7.5                                   | 50/150                                 | 1.212/1.25/1.288                       | 1.24       | 1.03 | .95 |



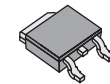
SOT-89

### Unity Power Factor LED Lamp Driver ICs

| MOUSER STOCK NO. |                | Package | Input DC Supply Voltage (V) | AC Input Voltage (V) | Shut-Down Mode Supply Current (Max)(mA) | Internally Regulated Voltage (V)(Typ) | PWM Pull-Down Resistance (Min/Max)(kΩ) | PWM Input Voltage (Low/High) (V) | Price Each |      |     |
|------------------|----------------|---------|-----------------------------|----------------------|---|---------------------------------------|--|----------------------------------|------------|------|-----|
| Mfr.             | Mfr. Part No.  |         |                             |                      |   |                                       |  |                                  | 1          | 100  | 500 |
| ◆                | 689—HV9931LG-G | SOIC-8  | 8.0 - 450                   | 85 - 264             | 1                                       | 7.5                                   | 50/150                                 | 1.0(Max)/2.4(Min)                | 1.24       | 1.03 | .95 |

### Temperature Compensated Constant Current LED Driver ICs

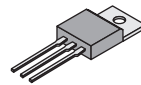
| MOUSER STOCK NO. |               | Package | DC Input Voltage (V) | Current Regulation (Typ)(mA) | Maximum Operating Voltage (V) | Dynamic Resistance (Typ)(Ω) | Power Dissipation @ TA = 25°C (W) | Temperature Coefficient %/°C | Price Each |     |     |
|------------------|---------------|---------|----------------------|------------------------------|-------------------------------|-----------------------------|-----------------------------------|------------------------------|------------|-----|-----|
| Mfr.             | Mfr. Part No. |         |                      |                              |                               |                             |                                   |                              | 1          | 100 | 500 |
| ◆                | 689—CL2K4-G   | TO-252  | 5.0 - 90             | 20                           | 100                           | 300k                        | 2.0                               | 0.01                         | .70        | .58 | .54 |
| ◆                | 689—CL2N8-G   | SOT-89  | 5.0 - 90             | 20                           | 100                           | 300k                        | 1.3                               | 0.01                         | .49        | .41 | .38 |
|                  | 689—CL2N3-G   | TO-92   | 5.0 - 90             | 20                           | 100                           | 300k                        | 0.6                               | 0.01                         | .44        | .36 | .34 |



TO-252

### Linear Fixed Constant Current LED Driver ICs

| MOUSER STOCK NO. |               | Package | Input DC Supply Voltage (V) | AC Input Voltage (V) | Shut-Down Mode Supply Current (Max)(mA) | Internally Regulated Voltage (V)(Typ) | PWM Pull-Down Resistance (Min/Max)(kΩ) | PWM Input Voltage (Low/High) (V) | Price Each |      |      |
|------------------|---------------|---------|-----------------------------|----------------------|---|---------------------------------------|--|----------------------------------|------------|------|------|
| Mfr.             | Mfr. Part No. |         |                             |                      |   |                                       |  |                                  | 1          | 100  | 500  |
| ◆                | 689—CL6K4-G   | TO-252  | 6.5 - 28                    | 3.0/5.0/10           | 90/100/110                              | 1.3                                   | 40                                     | 120/135/150                      | 1.52       | 1.26 | 1.17 |
| ◆                | 689—CL6N5-G   | TO-220  | 6.5 - 28                    | 3.0/5.0/10           | 90/100/110                              | 2.5                                   | 62                                     | 120/135/150                      | 1.62       | 1.34 | 1.24 |



TO-220