

## **POWER MANAGEMENT**

### **EL Lamp Drivers: Die Specifications**

**IMP525**

**Single Cell Battery Powered Electroluminescent Lamp Driver**

**IMP527**

**Single Cell Battery Powered EL Lamp Driver, 180V<sub>pp</sub> Drive**

**IMP528**

**High-Voltage EL Lamp Driver, 220V<sub>pp</sub> Drive**

**IMP560**

**Power Efficient EL Lamp Driver**

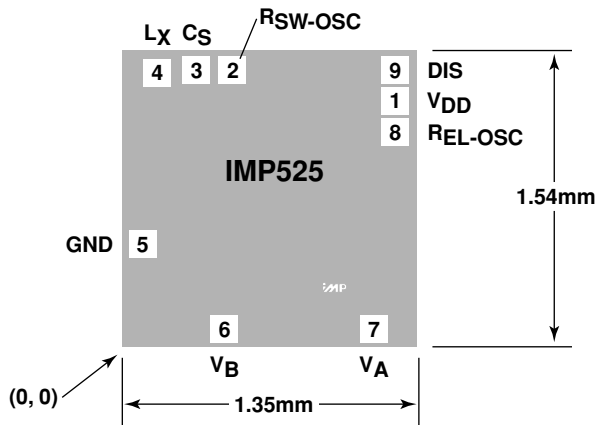
**IMP803**

**High-Voltage EL Lamp Driver**

## IMP525 Single Cell Battery Powered EL Lamp Driver

### General Information

Die Thickness:	25 mils (625 microns)
Bond Wire Size:	1.0 mil (25 microns)
Back Side Metal:	None
Back Side Potential:	Ground
Die Attach Method:	Conductive Adhesive
Bond Pad Metal:	Aluminum, 1% Silicon, 1/2% Copper
Bond Pad Size:	100 microns per side
Die Size:	1.35mm x 1.54mm



### Pad Description

Pad Number	Name	Function
1	V <sub>DD</sub>	Positive voltage supply.
2	R <sub>SW-OSC</sub>	Switch-mode oscillator frequency setting pad.
3	C <sub>S</sub>	Boost converter storage capacitor pad.
4	L <sub>X</sub>	Inductor pad.
5	GND	Ground pad.
6	V <sub>B</sub>	EL lamp drive.
7	V <sub>A</sub>	EL lamp drive.
8	R <sub>EL-OSC</sub>	EL lamp oscillator frequency setting pad.
9*	DIS	Disable pad. DIS = HIGH disables chip.

\* See Ordering Information table

### Pad Location<sup>1</sup>

Pad Number	X (microns)	Y (microns)
1	1153	1092
2	476	1226
3	314	1226
4	143	1216
5	111	460
6	397	112
7	1104	112
8	1153	958
9	1153	1226

Notes 1. To bonding pad center

### Ordering Information

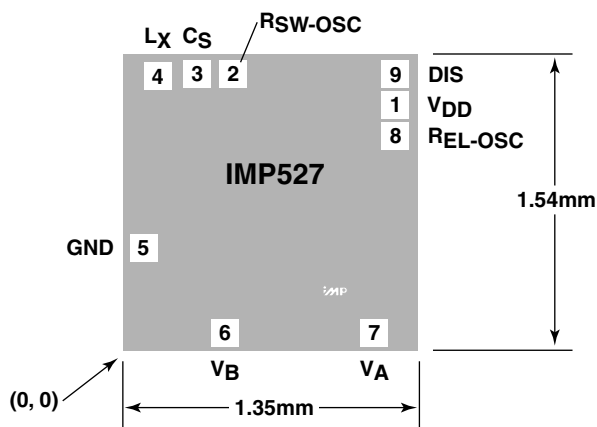
Part Number	Pad Number	Description	
		Disable Pad Active	Disable Pad Not Active
IMP525/D	9		●
IMP525/D1	9	●	

525 Die\_01

## IMP527 Single Cell Battery Powered EL Lamp Driver, 180V<sub>PP</sub> Drive

### General Information

Die Thickness:	25 mils (625 microns)
Bond Wire Size:	1.0 mil (25 microns)
Back Side Metal:	None
Back Side Potential:	Ground
Die Attach Method:	Conductive Adhesive
Bond Pad Metal:	Aluminum, 1% Silicon, 1/2% Copper
Bond Pad Size:	100 microns per side
Die Size:	1.35mm x 1.54mm



### Pad Description

Pad Number	Name	Function
1	V <sub>DD</sub>	Positive voltage supply.
2	R <sub>SW-OSC</sub>	Switch-mode oscillator frequency setting pad.
3	C <sub>S</sub>	Boost converter storage capacitor pad.
4	L <sub>X</sub>	Inductor pad.
5	GND	Ground pad.
6	V <sub>B</sub>	EL lamp drive.
7	V <sub>A</sub>	EL lamp drive.
8	R <sub>EL-OSC</sub>	EL lamp oscillator frequency setting pad.
9*	DIS	Disable pad. DIS = HIGH disables chip.

\* See Ordering Information table

### Pad Location<sup>1</sup>

Pad Number	X (microns)	Y (microns)
1	1153	1092
2	476	1226
3	314	1226
4	143	1216
5	111	460
6	397	112
7	1104	112
8	1153	958
9	1153	1226

Notes 1. To bonding pad center

### Ordering Information

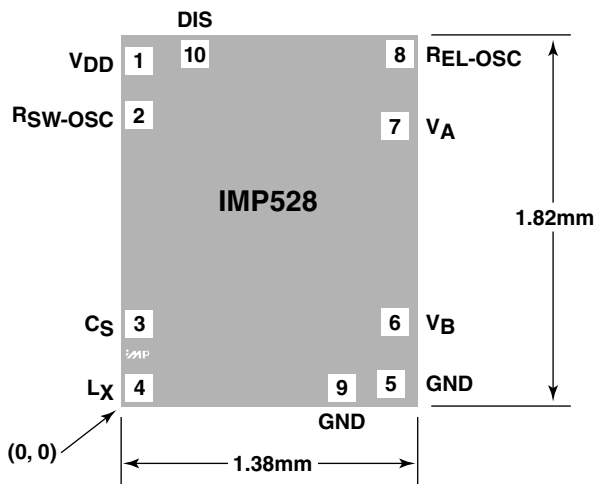
Part Number	Disable Pad Number	Description	
		Disable Pad Active	Disable Pad Not Active
IMP527/D	9		●
IMP527/D1	9	●	

527 Die\_101

## IMP528 High-Voltage EL Lamp Driver, 220V<sub>PP</sub> Drive

### General Information

Die Thickness:	25 mils (625 microns)
Bond Wire Size:	1.0 mil (25 microns)
Back Side Metal:	None
Back Side Potential:	Ground
Die Attach Method:	Conductive Adhesive
Bond Pad Metal:	Aluminum, 1% Silicon, 1/2% Copper
Bond Pad Size:	100 microns per side
Die Size:	1.38mm x 1.82mm



### Pad Description

Pad Number	Name	Function
1	V <sub>DD</sub>	Positive voltage supply.
2	R <sub>SW-OSC</sub>	Switch-mode oscillator frequency setting pad.
3	C <sub>S</sub>	Boost converter storage capacitor pad.
4	L <sub>X</sub>	Inductor pad.
5	GND	Ground pad.
6	V <sub>B</sub>	EL lamp drive.
7	V <sub>A</sub>	EL lamp drive.
8	R <sub>EL-OSC</sub>	EL lamp oscillator frequency setting pad.
9	GND	Ground pad.
10*	DIS	Disable pad. DIS = HIGH disables chip.

\* See Ordering Information table

### Pad Location<sup>1</sup>

Pad Number	X (microns)	Y (microns)
1	152	1480
2	152	1253.5
3	152	387.75
4	152	122.5
5	1198.5	140
6	1215	395
7	1215	1208.5
8	1234	1508.5
9	998	122.5
10	382	1553.5

Notes 1. To bonding pad center

### Ordering Information

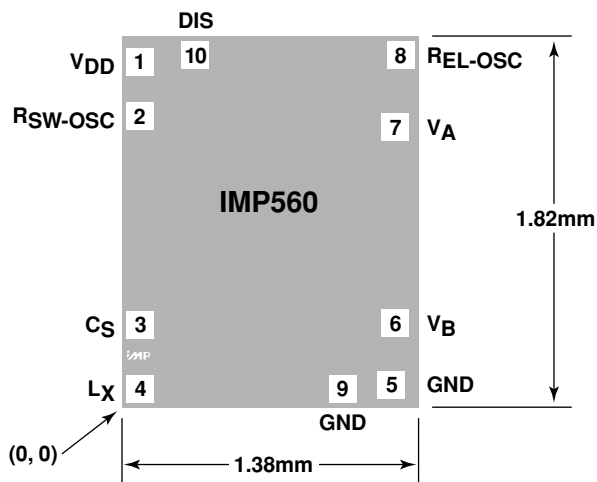
Part Number	Disable Pad Number	Description	
		Disable Pad Active	Disable Pad Not Active
IMP528/D	10		●
IMP528/D1	10	●	

528 Die\_101

## IMP560 Power Efficient EL Lamp Driver

### General Information

Die Thickness:	25 mils (625 microns)
Bond Wire Size:	1.0 mil (25 microns)
Back Side Metal:	None
Back Side Potential:	Ground
Die Attach Method:	Conductive Adhesive
Bond Pad Metal:	Aluminum, 1% Silicon, 1/2% Copper
Bond Pad Size:	100 microns per side
Die Size:	1.38mm x 1.82mm



### Pad Description

Pad Number	Name	Function
1	V <sub>DD</sub>	Positive voltage supply.
2	R <sub>SW-OSC</sub>	Switch-mode oscillator frequency setting pad.
3	C <sub>S</sub>	Boost converter storage capacitor pad.
4	L <sub>X</sub>	Inductor pad.
5	GND	Ground pad.
6	V <sub>B</sub>	EL lamp drive.
7	V <sub>A</sub>	EL lamp drive.
8	R <sub>EL-OSC</sub>	EL lamp oscillator frequency setting pad.
9	GND	Ground pad.
10*	DIS	Disable pad. DIS = HIGH disables chip.

\* See Ordering Information table

### Pad Location<sup>1</sup>

Pad Number	X (microns)	Y (microns)
1	152	1480
2	152	1253.5
3	152	387.75
4	152	122.5
5	1198.5	140
6	1215	395
7	1215	1208.5
8	1234	1508.5
9	998	122.5
10	382	1553.5

Notes 1. To bonding pad center

### Ordering Information

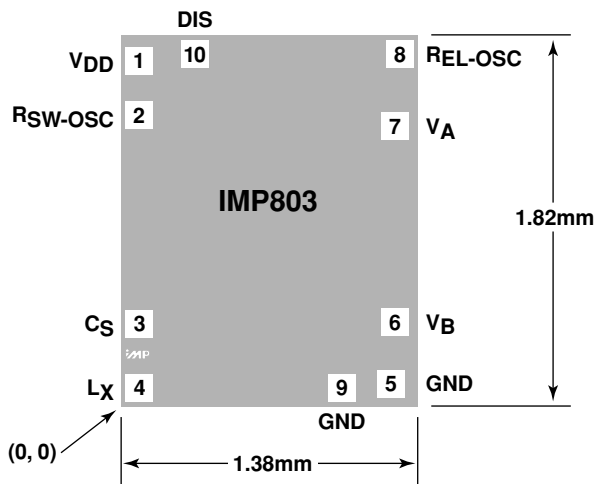
Part Number	Pad Number	Description	
		Disable Pad Active	Disable Pad Not Active
IMP560/D	10		●
IMP560/D1	10	●	

560 Die\_101

## IMP803 High-Voltage EL Lamp Driver

### General Information

Die Thickness:	25 mils (625 microns)
Bond Wire Size:	1.0 mil (25 microns)
Back Side Metal:	None
Back Side Potential:	Ground
Die Attach Method:	Conductive Adhesive
Bond Pad Metal:	Aluminum, 1% Silicon, 1/2% Copper
Bond Pad Size:	100 microns per side
Die Size:	1.38mm x 1.82mm



### Pad Description

Pad Number	Name	Function
1	V <sub>DD</sub>	Positive voltage supply.
2	R <sub>SW-OSC</sub>	Switch-mode oscillator frequency setting pad.
3	C <sub>S</sub>	Boost converter storage capacitor pad.
4	L <sub>X</sub>	Inductor pad.
5	GND	Ground pad.
6	V <sub>B</sub>	EL lamp drive.
7	V <sub>A</sub>	EL lamp drive.
8	R <sub>EL-OSC</sub>	EL lamp oscillator frequency setting pad.
9	GND	Ground pad.
10*	DIS	Disable pad. DIS = HIGH disables chip.

\* See Ordering Information table

### Pad Location<sup>1</sup>

Pad Number	X (microns)	Y (microns)
1	152	1480
2	152	1253.5
3	152	387.75
4	152	122.5
5	1198.5	140
6	1215	395
7	1215	1208.5
8	1234	1508.5
9	998	122.5
10	382	1553.5

Notes 1. To bonding pad center

### Ordering Information

Part Number	Pad Number	Description	
		Disable Pad Active	Disable Pad Not Active
IMP803SX	10		●
IMP803/D1	10	●	

803 Die\_101