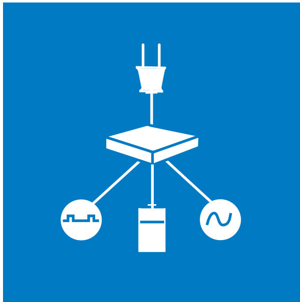


POWER MANAGEMENT

EL Lamp Drivers: Die Specifications

IMP525
Single Cell Battery Powered Electroluminescent Lamp Driver

IMP527
Single Cell Battery Powered EL Lamp Driver, 180V_{PP} Drive

IMP528
High-Voltage EL Lamp Driver, 220V_{PP} Drive

IMP560
Power Efficient EL Lamp Driver

IMP803
High-Voltage EL Lamp Driver

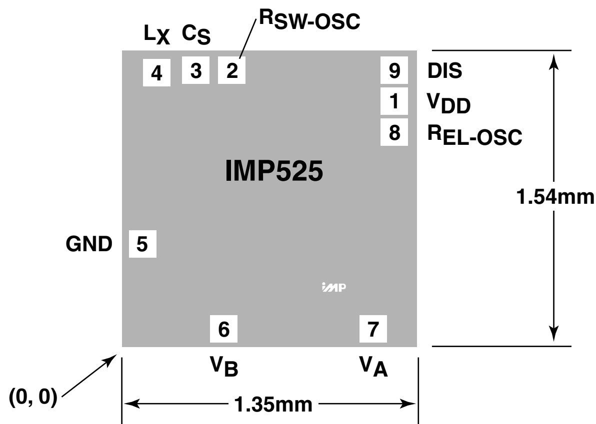
IMP®
ISO 9001 Registered

408-432-9100/www.impweb.com

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_{DD}	Positive voltage supply.
2	R_{SW-OSC}	Switch-mode oscillator frequency setting pad.
3	C_S	Boost converter storage capacitor pad.
4	L_X	Inductor pad.
5	GND	Ground pad.
6	V_B	EL lamp drive.
7	V_A	EL lamp drive.
8	R_{EL-OSC}	EL lamp oscillator frequency setting pad.
9*	DIS	Disable pad. DIS = HIGH disables chip.

** See Ordering Information table*

Pad Location[1]

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_t01

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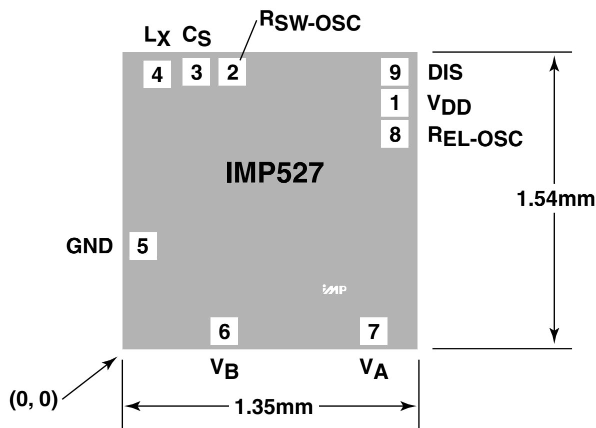
IMP527
Single Cell Battery Powered EL Lamp Driver, 180V_{PP} Drive

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_{DD}	Positive voltage supply.
2	$R_{SW\text{-}OSC}$	Switch-mode oscillator frequency setting pad.
3	C_S	Boost converter storage capacitor pad.
4	L_X	Inductor pad.
5	GND	Ground pad.
6	V_B	EL lamp drive.
7	V_A	EL lamp drive.
8	$R_{EL\text{-}OSC}$	EL lamp oscillator frequency setting pad.
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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	Description: Disable Pad Not Active
IMP527/D	9		●
IMP527/D1	9	●	

527 Die_t01

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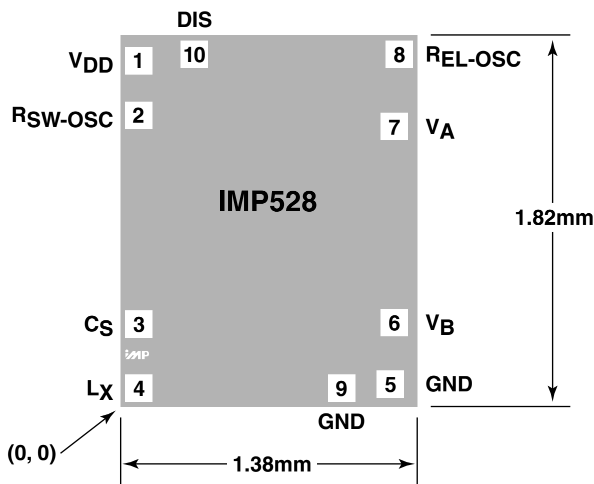
IMP528
High-Voltage EL Lamp Driver, 220V_{PP} Drive

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_{DD}	Positive voltage supply.
2	R_{SW-OSC}	Switch-mode oscillator frequency setting pad.
3	C_S	Boost converter storage capacitor pad.
4	L_X	Inductor pad.
5	GND	Ground pad.
6	V_B	EL lamp drive.
7	V_A	EL lamp drive.
8	R_{EL-OSC}	EL lamp oscillator frequency setting pad.
9	GND	Ground pad.
10*	DIS	Disable pad. DIS = HIGH disables chip.

** See Ordering Information table*

Pad Location[1]

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_t01

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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

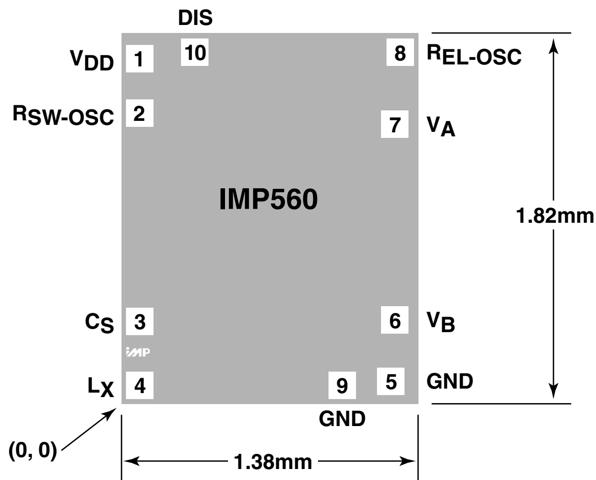
Back Side Potential: Ground

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_{DD}	Positive voltage supply.
2	$R_{SW\text{-}OSC}$	Switch-mode oscillator frequency setting pad.
3	C_S	Boost converter storage capacitor pad.
4	L_X	Inductor pad.
5	GND	Ground pad.
6	V_B	EL lamp drive.
7	V_A	EL lamp drive.
8	$R_{EL\text{-}OSC}$	EL lamp oscillator frequency setting pad.
9	GND	Ground pad.
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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	Description: Disable Pad Not Active
IMP560/D	10		●
IMP560/D1	10	●	

560 Die_t01

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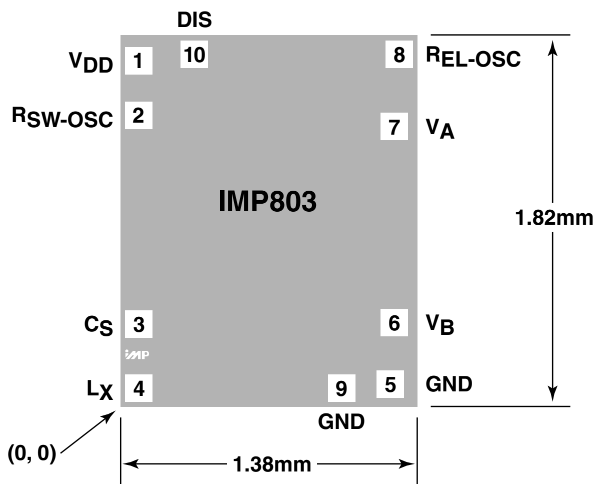
IMP803
High-Voltage EL Lamp Driver

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



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7	V_A	EL lamp drive.
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9	GND	Ground pad.
10*	DIS	Disable pad. DIS = HIGH disables chip.

** See Ordering Information table*

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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_t01

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