

I-Series

1.5 - 3W Isolated DC/DC-Converters

- 1kVDC or 3kVDC Isolation
- Regulated 24 Pin DIP Package
- Single and Dual Output
- Optional Low Profile Metal Package
- 5.2kVDC Isolation Meet EN60601-1-2

Selection Guide (See Model Code Information on Page 44)

Ordering Code	Nominal Input Voltage (VDC)	Input Current		Output Voltage (VDC)	Output Current (mA)	Efficiency at Full Load (%)
		No Load (mA)	Full Load (mA)			

1.5W, 1kVDC, Single Output

I1.5-053.6S(H)-(M)	5	40	457	3.6	400	63
I1.5-0505S(H)-(M)	5	43	462	5	300	65
I1.5-1205S(H)-(M)	12	25	195	5	300	64
I1.5-1212S(H)-(M)	12	22	189	12	125	66
I1.5-2405S(H)-(M)	24	16	98	5	300	64
I1.5-247.2S(H)-(M)	24	16	96	7.2	200	65
I1.5-2415S(H)-(M)	24	12	93	15	100	67

1.5W, 1kVDC, Dual Output

I1.5-053.6D(H)-(M)	5	100	600	±3.6	±200	50
I1.5-0505D(H)-(M)	5	90	566	±5	±150	53
I1.5-1205D(H)-(M)	12	80	236	±5	±150	53
I1.5-1212D(H)-(M)	12	75	216	±12	±63	58
I1.5-2405D(H)-(M)	24	38	118	±5	±150	53
I1.5-247.2D(H)-(M)	24	35	114	±7.2	±100	55
I1.5-2415D(H)-(M)	24	33	108	±15	±50	58

2W, 1kVDC, Single Output

I2-0505S(H)-(M)	5	43	615	5	400	65
I2-0509S(H)-(M)	5	47	545	9	200	66
I2-1205S(H)-(M)	12	22	260	5	400	64
I2-1209S(H)-(M)	12	28	227	9	200	66
I2-1212S(H)-(M)	12	30	245	12	167	68
I2-2405S(H)-(M)	24	18	132	5	400	63
I2-2412S(H)-(M)	24	22	123	12	167	68

(* Select on Inquiry Form 3kVDC Isolation ('H' Feature) instead of 1kVDC and Metal Case (Suffix 'M') vs. Plastic Case.

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Selection Guide (See Model Code Information on Page 44)

Ordering Code	Nominal Input Voltage (VDC)	Input Current		Output Voltage (VDC)	Output Current (mA)	Efficiency at Full Load (%)
		No Load (mA)	Full Load (mA)			

2W, 1kVDC, Dual Output

I2-0505D(H)-(M)	5	140	784	±5	±200	51
I2-0512D(H)-(M)	5	120	666	±12	±83	60
I2-1205D(H)-(M)	12	100	303	±5	±200	55
I2-2405D(H)-(M)	24	40	139	±5	±200	60
I2-2412D(H)-(M)	24	35	128	±12	±83	65

3W, 1kVDC, Single Output

I3-0505S(H)-(M)	5	65	938	5	600	64
I3-0512S(H)-(M)	5	65	882	12	250	68
I3-1205S(H)-(M)	12	32	391	5	600	64
I3-1209S(H)-(M)	12	40	368	9	333	68
I3-1212S(H)-(M)	12	40	357	12	250	70
I3-2405S(H)-(M)	24	23	195	5	600	64
I3-2412S(H)-(M)	24	28	189	12	250	66

3W, 1kVDC, Dual Output

I3-0505D(H)-(M)	5	210	1200	±5	±300	50
I3-0512D(H)-(M)	5	190	1053	±12	±125	57
I3-1205D(H)-(M)	12	120	454	±5	±300	55
I3-1212D(H)-(M)	12	100	431	±12	±125	58
I3-2405D(H)-(M)	24	45	208	±5	±300	60
I3-2412D(H)-(M)	24	40	192	±12	±125	65
I3-2415D(H)-(M)	24	30	192	±15	±100	65

(* Select on Inquiry Form 3kVDC Isolation ('H' Feature) instead of 1kVDC and Metal Case (Suffix 'M') vs. Plastic Case.

See model Code information on page 44.

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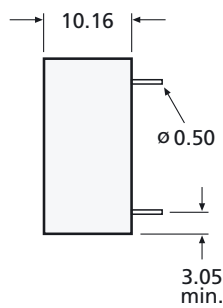
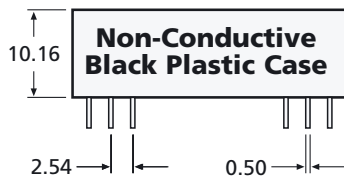
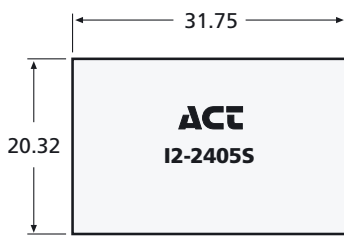
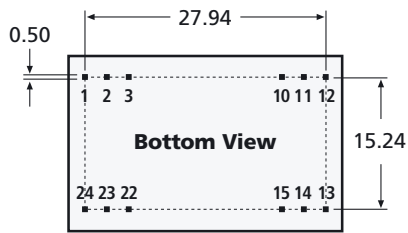
Specifications – Typical at +25°C, Unless Otherwise Noted

Voltage Range	±10%	Temperature Coefficient	±0.02% / °C
Filter	π (Pi) Network	Efficiency	65% to 78%
Rated Voltage	1000 VDC, Standard 3000 VDC, Feature "H"	Switching Frequency	125 KHz, typ.
Leakage Current	1 mA	Operating Temperature	-40°C to +85°C -40°C to +71°C (no derating)
Resistance	$10^9 \Omega$	Storage Temperature	-55°C to +125°C
Capacitance	60 pF, typ.	Derating	None Required
Voltage Accuracy	±2%, max.	Humidity	Up to 90%, Non-condensing
Voltage Balance (dual Outputs)	±1%	Cooling	Free-air Convection
Ripple and Noise (at 20 MHz BW)	75 mVp-p, max.	Dimensions	31.75 x 20.32 x 10.16 mm 1.25 x 0.80 x 0.40"
Short Circuit Protection	Continuous	Weight	Black Plastic 12.2 g Metal 14.5 g
Short Circuit Restart	Automatic	Case Material	Non-conductive Black Plastic Nickel-Coated Copper = Suffix „M"
Line Voltage Regulation	±0.5%, max.		
Load Voltage Regulation	±0.5%, max.		

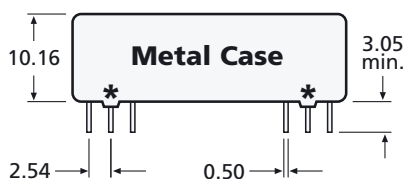
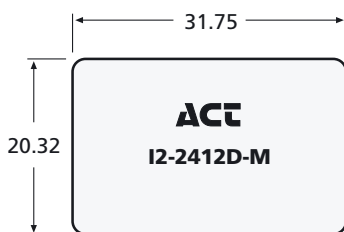
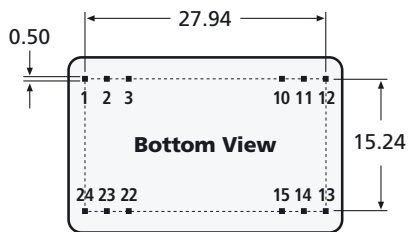
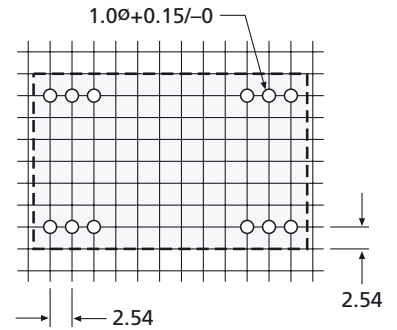
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DIP24 Package Style and Pinning (mm)



Recommended Footprint Details



* Built-in stand-offs to ease PCB cleaning

Pin Connections

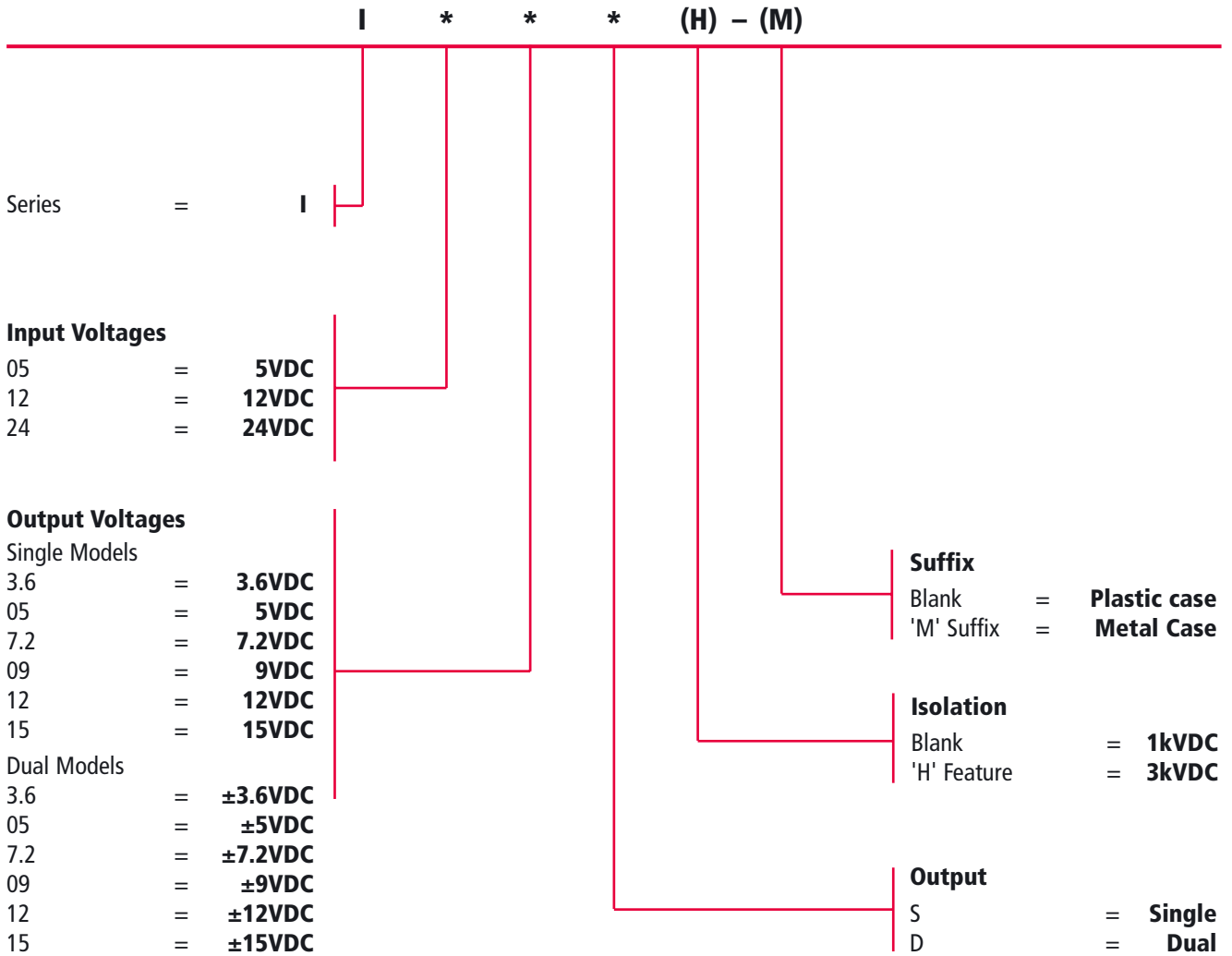
Pin #	1kVDC Standard		3kVDC	
	Single	Dual	Single	Dual
1	+Vin	+Vin	+Vin	+Vin
2	NC	-Vout	+Vin	+Vin
3	NC	Common	Omitted	Omitted
10	-Vout	Common	Omitted	Common
11	+Vout	+Vout	Omitted	Common
12	-Vin	-Vin	-Vout	Omitted
13	-Vin	-Vin	+Vout	-Vout
14	+Vout	+Vout	Omitted	Omitted
15	-Vout	Common	Omitted	+Vout
22	NC	Common	Omitted	Omitted
23	NC	-Vout	-Vin	-Vin
24	+Vin	+Vin	-Vin	-Vin

Tolerance:
x.xx = ±0.25mm

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Model Code Information



Ordering Examples: For availability see Selection Guides on pages 40 and 41

I-057.2DH-M = I-series, 5VDC input, 7.2VDC output, single output, 3kVDC isolation, DIP24 package size, metal case