

General Specifications

Efficiency		91%
Switching frequency	Fixed	300 kHz typ.
Approvals and standards	(See Note 7)	TÜV Product Services EN60950, UL/cUL60950
Material flammability		UL94V-0
Weight		28.3 g (1 oz)
MTBF	Telcordia SR-332	4,456,655 hours

Environmental Specifications

Thermal performance	Operating ambient temperature	-0 °C to +80 °C
(See Note 8)	Non-operating temperature	-40 °C to +125 °C
Protection		
Short-circuit	Foldback, non-latching	
Over-temperature	Hiccup, non-latching	
Recommended System Capacitance		
Input capacitance	(See Note 9)	270 μF / 20 mW ESR max.
Output capacitance	(See Note 9)	680 μF / 10 mW ESR max.

Ordering Information

Model Number ^(10, 12)	Output Power (Max.)	Input Voltage	Output Voltage	Output Current (Min.)	Output Current (Max.)	Efficiency (Typical)	Regulation	
							Line	Load
SIL30C-12SADJ-VJ	150 W	10.2 - 13.8 Vdc	0.9 - 5 V	0 A	30 A	91%	±0.2%	±1.5%

Part Number System with Options

Product Family	Rated Output Current	Performance	Input Voltage	Number of Outputs	Output Voltage	Mounting Option	Packaging Options
SIL	30	C	12	S	ADJ	V	J
SIL = Single In Line	30 = 30 Amp	C = Cost Optimized	12 = 10.2 - 13.8 Vdc	S = Single Output	ADJ = Adjustable Output	V = Vertical H = Horizontal	J = Pb free (RoHS 6/6 compliant)

Output Voltage Adjustment

The ultra-wide output voltage trim range offers major advantages to users who select the SIL30C-12SADJ. It is no longer necessary to purchase a variety of modules in order to cover different output voltages. The output voltage can be trimmed in a range of 0.9 Vdc to 5.0 Vdc. When the SIL30C-12SADJ converter leaves the factory the output has been adjusted to the default voltage of 0.9 V.

Notes:

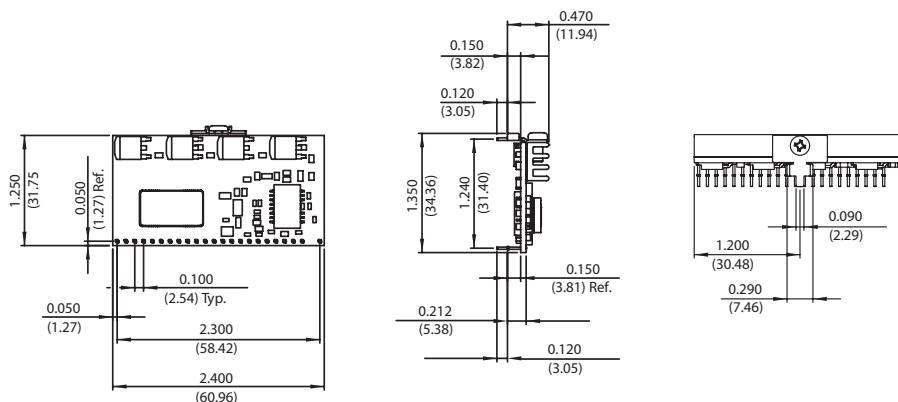
1. Uses external resistor from TRIM to output ground. See Application Note 132 for details.
2. Measured with external filter. See Application Note 132 for details.
3. $di/dt = 10 \text{ A}/\mu\text{s}$, $V_{in} = \text{Nom}$, $T_c = 25^\circ\text{C}$, load change = 0.5 I_o max to 0.75 I_o max and 0.75 I_o max to 0.5 I_o max.
4. External input fusing is recommended.
5. Power up is the time from application of dc input to POWER GOOD high. Remote ON/OFF asserted high to POWER GOOD high.
6. Signal line assumed <3 m.
7. This product is only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.
8. See Application Note 132 for operation above 50 °C.
9. See Application Note 132 for ripple current requirements.
10. The standard unit with the suffix '-V' is for vertical mounting. To order a unit with horizontal mounting, please add the suffix '-H' to the model number, e.g. SIL30C-12SADJ-HJ.
11. This model has a wide trim output of between 0.9 Vdc to 5 Vdc. An external resistor adjusts the output voltage.
12. NOTICE: Some models do not support all options. Please contact your local Artesyn representative or use the on-line model number search tool at <http://www.artesyn.com> to find a suitable alternative.

Mechanical Drawings

Pin Assignments

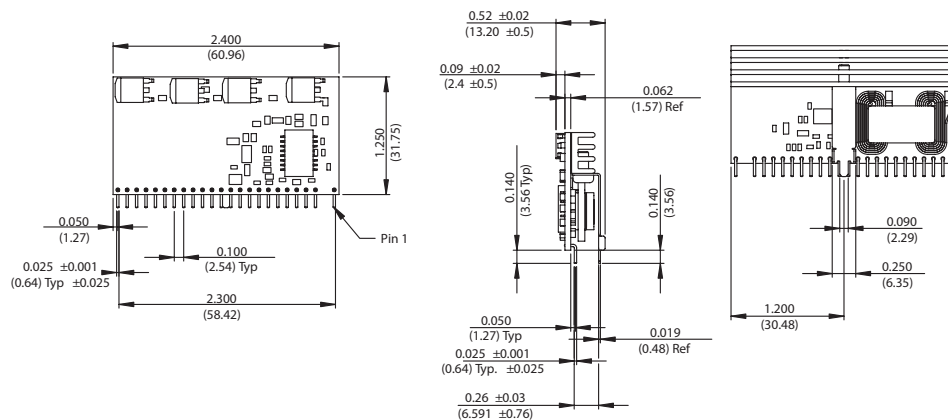
Pin	Function
1	Trim
2	No Pin
3	Ground
4	Power Good
5	Not Connected
6	Current Share
7	Ground
8	Ground
9	Remote ON/OFF
10	Remote Sense (GND)
11	Remote Sense (O/P)
12	Vin
13	Vin
14	Vin
15	Vout
16	Vout
17	Ground
18	Vout
19	Ground
20	Vout
21	Ground
22	Vout
23	Ground
24	Vout

Horizontal Mount



All dimensions in inches (mm)
General tolerance ± 0.015 in (± 0.30 mm)
except where specified otherwise

Vertical Mount



All dimensions in inches (mm)
General tolerance ± 0.015 in (± 0.30 mm)
except where specified otherwise

WORLDWIDE OFFICES

Americas

2900 South Diablo Way
Suite B100
Tempe, AZ 85282, USA
+1 888 412 7832

Europe (UK)

Ground Floor Offices, Barberry House
4 Harbour Buildings, Waterfront West
Brierley Hill, West Midlands
DY5 1LN, UK
+44 (0) 1384 842 211

Asia (HK)

14/F, Lu Plaza
2 Wing Yip Street
Kwun Tong, Kowloon
Hong Kong
+852 2176 3333

ARTESYN
An Advanced Energy Company

www.artesyn.com

Artesyn Embedded Technologies, Artesyn Embedded Power, Artesyn, and all Artesyn related logos are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners. Specifications are subject to change without notice. © 2019 Artesyn Embedded Technologies, Inc. All rights reserved. For full legal terms and conditions, please visit www.artesyn.com/legal.

For more information: www.artesyn.com
For support: productsupport.ep@artesyn.com

SIL30C Series 31Dec2019