

2 Watt IST Series



- Single Output
- SMD Package
- Industry Standard Pinout
- 1000 VDC Isolation
- MTBF >3 MHrs
- -40 °C to +85 °C Operation
- 3 Year Warranty

Specification

Input

- Input Voltage Range • Nominal $\pm 10\%$
 Input Reverse Voltage Protection • None

Output

- Output Voltage • See table
 Minimum Load • 10%
 Line Regulation • 1.5%/1% ΔV_{in}
 Load Regulation • 7.5% 10-100% load change
 Setpoint Accuracy • 100-110% of nominal at 10% load
 Ripple & Noise • 150 mV pk-pk 20 MHz bandwidth
 Temperature Coefficient • 0.03%/°C
 Short Circuit Protection • 1 s max, recycle input to reset

General

- Efficiency • See table
 Isolation Voltage • 1000 VDC
 Isolation Resistance • $10^9 \Omega$
 Switching Frequency • 5/12 V input: 110 kHz, 24 V input: 500 kHz typical at nominal input, full load
 MTBF • >3 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

- Operating Temperature • -40 °C to +85 °C
 Storage Temperature • -55 °C to +125 °C
 Case Temperature • 105 °C max
 Cooling • Convection-cooled
 Lead Temperature • 260 °C, 0.06 in (1.5 mm) from case, 10 s

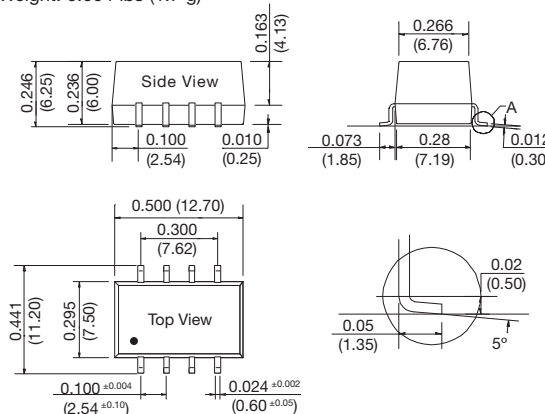
Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number ⁽¹⁾
5 VDC	5 V	400 mA	78%	IST0505A
	12 V	167 mA	79%	IST0512A
	15 V	133 mA	79%	IST0515A
12 VDC	5 V	400 mA	78%	IST1205A
	12 V	167 mA	80%	IST1212A
	15 V	133 mA	81%	IST1215A
24 VDC	5 V	400 mA	78%	IST2405A
	12 V	167 mA	79%	IST2412A
	15 V	133 mA	80%	IST2415A

Notes

1. For alternative pin out, add suffix '-X' to end of part number eg. IST2415A-X.

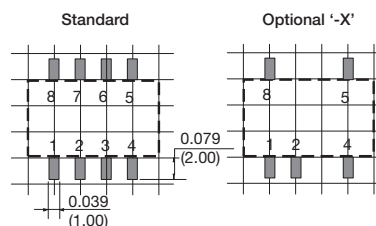
Mechanical Details

Weight: 0.004 lbs (1.7 g)



Recommended footprint

Top view grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



Pin	Standard	'-X' Version
1	GND	GND
2	Vin	Vin
4	0 V	0 V
5	+Vo	+Vo
3,6,7	N.C.	No Pin
8	N.C.	N.C.

N.C. Not connected

Notes

Dimensions in inches (mm)
 Tolerance: ± 0.010 (± 0.25)

Pin tolerance: ± 0.004 (± 0.10 mm)