

2 Watts IST Series



- Single Output
- SMD Package
- Industry Standard Pinout
- 1000 VDC Isolation
- MTBF >3.5 MHrs
- -40 °C to +85 °C Operation
- 3 Year Warranty

Specification

Input

- Input Voltage Range • Nominal ±10%
 Input Reverse Voltage Protection • None

Output

- Output Voltage • See table
 Minimum Load • 10%⁽²⁾
 Line Regulation • 1.2%/1% Δ Vin
 Load Regulation • 7.5% max for a 10-100% load change
 Setpoint Accuracy • 100-110% of nominal at 10% load
 Ripple & Noise • 200 mV pk-pk 20 MHz bandwidth
 Temperature Coefficient • 0.03%/°C

General

- Efficiency • See table
 Isolation Voltage • 1000 VDC
 Isolation Resistance • 10⁹ Ω
 Switching Frequency • 500 kHz typical at nominal input, full load
 MTBF • >3.5 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

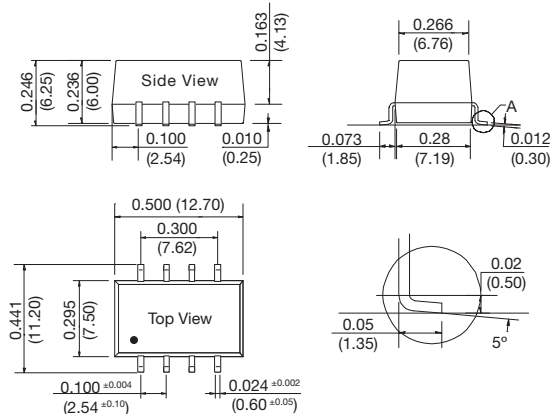
- Operating Temperature • -40 °C to +85 °C
 Storage Temperature • -55 °C to +125 °C
 Case Temperature • 105 °C max
 Cooling • Convection-cooled
 Lead Temperature • 260 °C, 0.06 in (1.5 mm) from case, 10 s

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number ⁽¹⁾
5 VDC	5.0 V	400 mA	78%	IST0505A†^
	12.0 V	167 mA	79%	IST0512A†^
	15.0 V	133 mA	79%	IST0515A†^
12 VDC	5.0 V	400 mA	78%	IST1205A†^
	12.0 V	167 mA	80%	IST1212A†^
	15.0 V	133 mA	81%	IST1215A†^
24 VDC	5.0 V	400 mA	78%	IST2405A†^
	12.0 V	167 mA	80%	IST2412A†^
	15.0 V	133 mA	81%	IST2415A†^

Notes

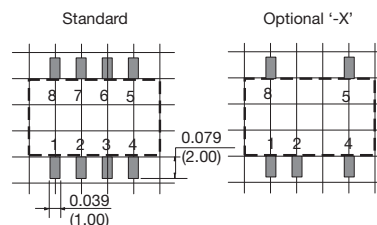
1. For alternative pin out, add suffix '-X' to end of part number eg. IST2415A-X.
 2. Operation at no load will not damage device but may not meet all specifications.
- † Available from Farnell & element14. See pages 284-290.
 ^ Available from Newark. See pages 291-296.

Mechanical Details



Recommended footprint

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



Pin	Standard	'-X' Version
1	-Vin	-Vin
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

1. All dimensions in inches (mm)
2. Tolerance: ±0.010 (±0.25)
3. Weight: 0.004 lbs (1.7 g)
4. Pin tolerance: ±0.004 (±0.10 mm)