

TA105 LINEAR DRIVE

FOR BRUSH SERVO MOTORS

BENEFITS

- Digital on-the-fly gain control (DTS)
- Over-temperature protection
- 40W continuous/85W peak
- Integral forced-air cooling
- Very low electrical noise
- Selectable current limit

APPLICATIONS

- Voice coil motors
- Small DC motors
- X-Y micro stages
- Metrology tools



TECHNICAL SPECIFICATIONS

ELECTRICAL

SUPPLY VOLTAGE

Unipolar: 15V to 48V, Absolute max: 52V

EQUIVALENT MOTOR VOLTAGE

Up to $\pm 43V^*$

MAXIMUM OUTPUT CURRENT

See SOA chart

FAULT

TTL Level 0 or 1

/ENABLE

TTL Level 0

COMMAND INPUT

$\pm 10V$ ($\pm 12V$ max)

TORQUE GAIN

0.05 A/V to 0.2 A/V

BANDWIDTH

5.0 kHz **

MECHANICAL

LENGTH

5.50 in (13.97 cm)

WIDTH

2.20 in (5.59 cm)

HEIGHT

2.08 in (5.28 cm)

WEIGHT

1.25 lbs (0.567 kg)

MOUNTING

(4) 6-32 screws

CONNECTIONS

COMMAND SIGNALS (J1)

10-Pin Terminal block, plug

MOTOR POWER, SIGNAL (J2)

5-Pin Terminal block, plug

(mating connectors supplied with drive)

ENVIRONMENTAL

MAXIMUM ALTITUDE

6,560FT (2000M)

TEMPERATURE (ambient)

Normal operation: 5°C to +40°C

Storage: -40°C to +70°C

Heatsink: +70°C maximum

HEAT DISSIPATION

See SOA chart

AIRFLOW

Internal fans, variable speed, thermally controlled

HUMIDITY

Operating: 10% to 70%, non-condensing

Storage: 10% to 95%, non-condensing

POLLUTION DEGREE 2

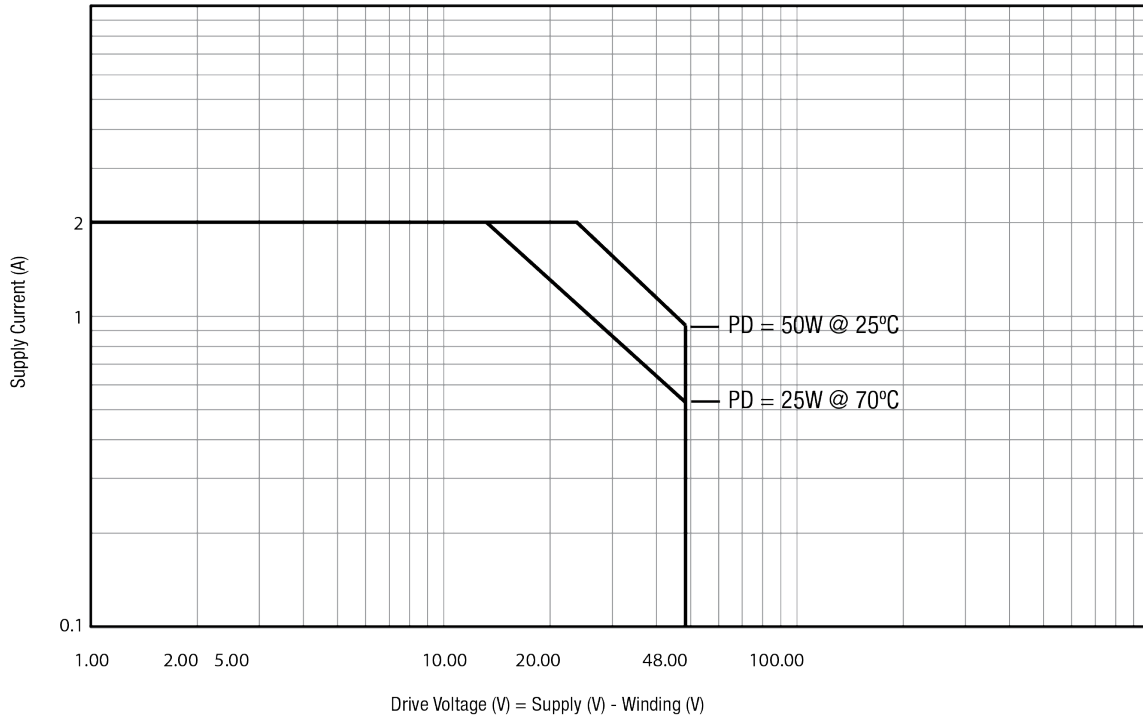
*dependent upon motor load

**into a 2.5mH load

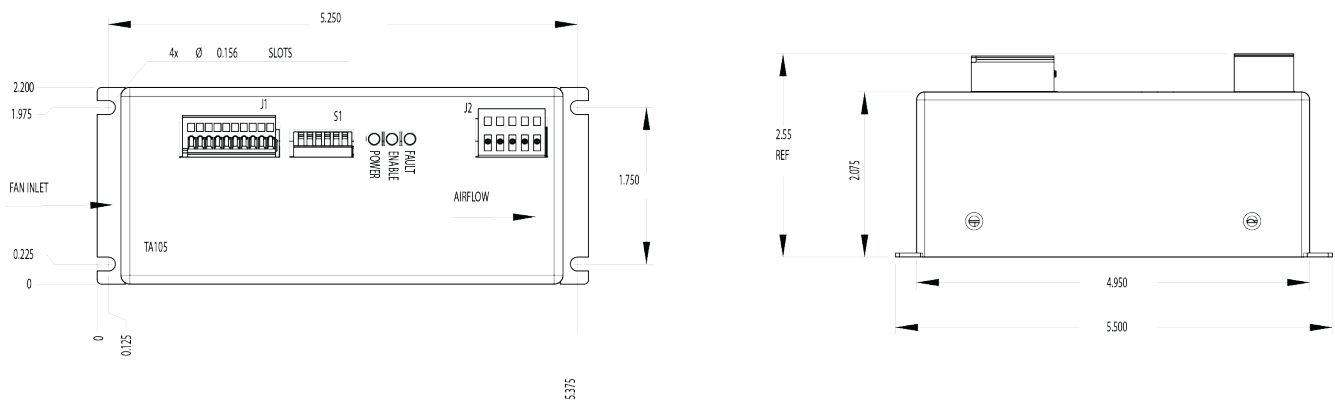
ROBUST LINEAR AMPLIFIER, PROVIDING QUIET AND SMOOTH POWER TO BRUSH MOTORS

The Trust Automation TA105 Linear Drive is a linear servo motor amplifier, designed to drive a brush motor with up to 85W of power. The TA105 is an excellent solution for voice coil type motors, high precision positioning applications and systems requiring ultra-quiet driving power where low noise operation is essential. The TA105 can be operated in voltage (velocity) mode or current (torque) mode, selected via user accessible DIP switch. Fault logic is also selectable via DIP switch.

SAFE OPERATING AREA



MECHANICAL DRAWING



Note: All measurements are in inches