

PART NUMBER: SES17

DESCRIPTION: sine wave

ELECTRICAL SPECIFICATIONS

| | |
|-------------------------|--|
| output waveform | Sine Wave |
| output signals | A phase, A,B phase |
| current consumption | ≤30 mA (LED: maximum 20mA) |
| frequency response | 0~20 KHz |
| output phase difference | A, B phase difference 90° ± 45° |
| supply voltage | 5 V dc ± 10% |
| output resolution (ppr) | 100, 200, 300, (360) (single phase only) |

MECHANICAL SPECIFICATIONS

| | |
|-------------------------|--|
| max shaft load, radial: | 1.9N (200gf) (2); 4.9N (500gf) (4) |
| axial: | 1.9N (200gf) (2); 4.9N (500gf) (4) |
| starting torque | 0.3 x 10 ⁻³ N·m (3 gf·cm) |
| max rotational speed | 6000 RPM |
| shock resistance | 500m/s ² (50G), 11ms, 3 times each on XYZ |
| vibration proof | 55 Hz, 1.5mm, 2 hours each on XYZ |
| weight | 20g (with 130mm cable) |
| cable | Vinyl wire (AWG28) 130mm |

ENVIRONMENTAL SPECIFICATIONS

| | |
|----------------|-------------------------|
| operating temp | 0° to +50° C |
| storage temp | -20° to +80° C |
| humidity | 90% max. non collecting |

ORDERING INSTRUCTIONS

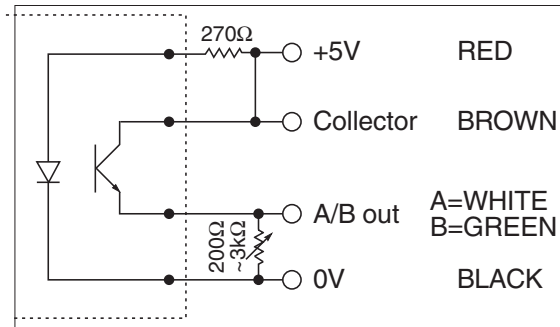
SES17(X) - XXXXX

| | | |
|-----------------|-------------------|------------------|
| Shaft Diameter: | Resolution (PPR): | Output Phase: |
| 2 = 2mm shaft | 100 = 100 PPR | A = Single Phase |
| 4 = 4mm shaft | 200 = 200 PPR | AB = Two-Phase |
| | 300 = 300 PPR | |
| | 360 = 360 PPR | |

PART NUMBER: SES17

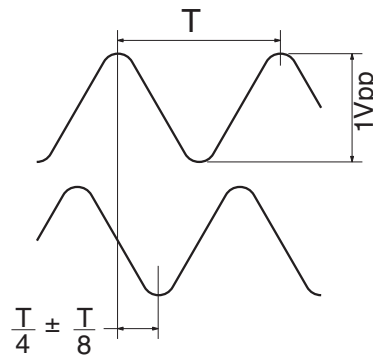
DESCRIPTION: sine wave

CIRCUIT CONNECTIONS

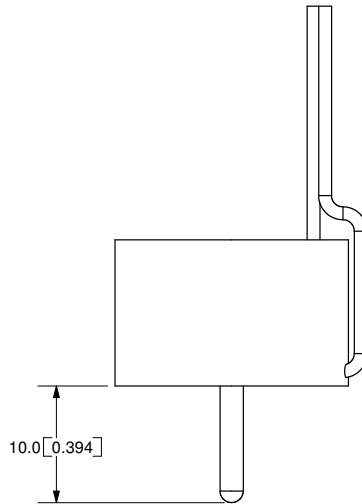
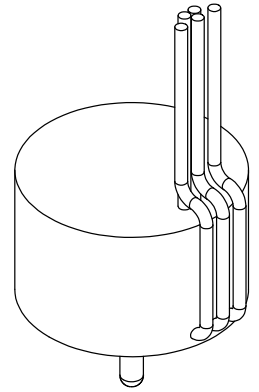
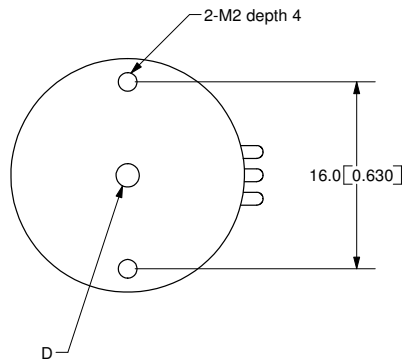
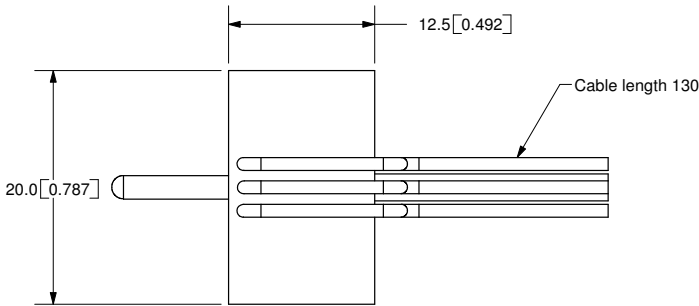


OUTPUT WAVEFORM

Clockwise rotation viewed from front



| REV. | DESCRIPTION | DATE |
|------|-------------|-----------|
| A | NEW DRAWING | 7/27/2007 |



TOLERANCE:
±0.3mm UNLESS OTHERWISE
SPECIFIED



20050 SW 112th Ave.
Tualatin, OR 97062
Phone: 503-612-2300
800-275-4899
Fax: 503-612-2383
Website: www.cui.com

| | | |
|----------------------------|--------------------|------------|
| TITLE: Incremental Encoder | | REV: A |
| PART NO. SES 17 shaft | UNITS: MM [INCHES] | |
| DRAWN BY: JMS | APPROVED BY: | SCALE: 2:1 |

PC FILE NAME:
SES 17 shaft

COPYRIGHT 2007
BY CUI INC.

| | | | | | | | | |
|-------------|-------|-----------|-----------|-----------|---------|---|---|---|
| Cable Color | Red | Brown | White | Green | Black | - | - | - |
| Output Type | Anode | Collector | Emitter A | Emitter B | Cathode | - | - | - |

| | |
|---|---------------------------------------|
| D | ∅2 ^{+0.01} _{-0.015} |
| D | ∅4 ^{+0.01} _{-0.015} |
| | - |
| | - |