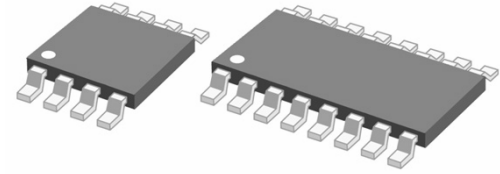
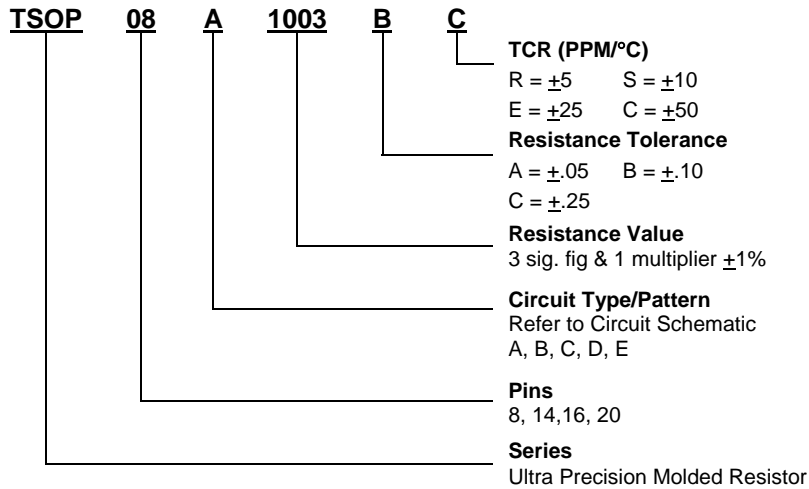


The content of this specification may change without notification 1/01/06

Custom solutions are available.

HOW TO ORDER



FEATURES

- TSOP High Precision NiCr Thin Film Resistor Networks with tight ratio and tracking
- 10 Standard Circuits
- Excellent to relative Tolerance and TCR
- High Stability Thin Film
- 2.3mm High from PC Board, most fit for high density compacted instruments.
- Custom Circuit Configuration is Available

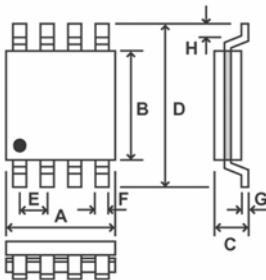
ELECTRICAL SPECIFICATIONS

| | |
|----------------------------------|-----------------|
| Rated Power per Resistor at 70°C | 60mW |
| Maximum Working Voltage | 75V |
| Maximum Overload Voltage | 150V |
| Absolute TCR ppm/°C | 50, 25, 10, 5 |
| Absolute Tolerance % | 0.25, 0.1, 0.05 |

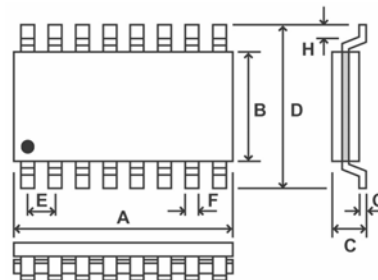
MECHANICAL SPECIFICATIONS

| | |
|-----------------------|--------------|
| Mechanical Protection | Epoxy Molded |
| Resistive Element | NiCr Film |
| Terminal Leads | Tinned |

TSOP 08 SCHEMATIC



TSOP 08



TSOP 16

TYPICAL PERFORMANCE

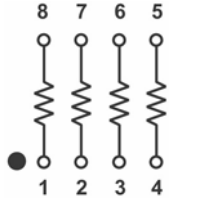
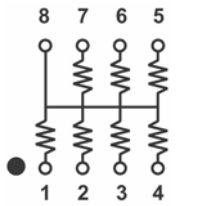
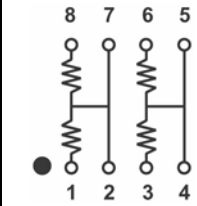
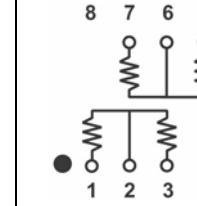
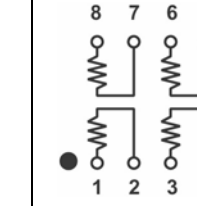
| C | ABS | TRACKING |
|---------|----------------|------------|
| | ± 5ppm | 1, 2, 3, 5 |
| ± 10ppm | 1, 2, 3, 5, 10 | |
| ± 25ppm | 1, 2, 3, 5, 10 | |
| ± 50ppm | 1, 2, 3, 5, 10 | |

| C | ABS | RATIO |
|---------|-----------------------------|------------------|
| | ± 0.05% | 0.025, 0.05, 0.1 |
| ± 0.10% | 0.025, 0.05, 0.1, 0.2 | |
| ± 0.25% | 0.025, 0.05, 0.1, 0.25, 0.5 | |

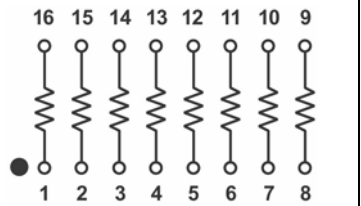
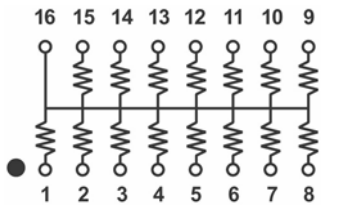
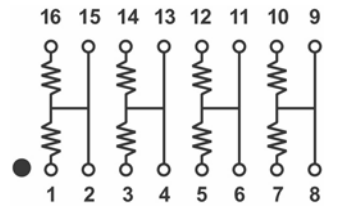
DIMENSIONS (mm)

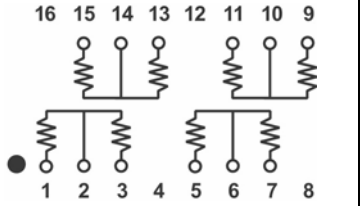
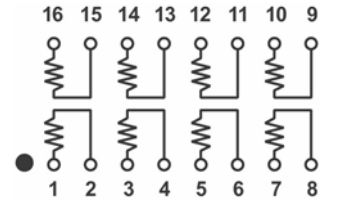
| Model | A | B | C | D | E | F | G | H |
|---------|------------|-----------|---------|-----------|------------|------------|-----------|---------|
| TSOP 08 | 5.5 ± 0.3 | 5.3 ± 0.3 | 2.3 max | 8.0 ± 0.2 | 1.27 ± 0.2 | 0.4 ± 0.05 | 0.2 ± 0.1 | 0.3 min |
| TSOP 16 | 10.5 ± 0.5 | 5.3 ± 0.3 | 2.3 max | 8.0 ± 0.2 | 1.27 ± 0.2 | 0.4 ± 0.05 | 0.2 ± 0.1 | 0.3 min |

CIRCUIT SPECIFICATION

| Circuit Symbol | A | B | C | D | E |
|-----------------------------------|---|---|--|---|---|
| TSOP 08 Circuit Layout Options |  |  |  |  |  |
| Resistance Range (Ω) | 50.0 ~ 22.0K | 50.0 ~ 10.0K | 50.0 ~ 22.0K | 50.0 ~ 22K | 500 ~ 10.0K |

CIRCUIT SPECIFICATION – 16 PINS

| Circuit Symbol | A | B | C |
|-----------------------------------|---|--|---|
| TSOP 16 Circuit Layout Options |  |  |  |
| Resistance Range (Ω) | 50.0 ~ 22.0K | 50.0 ~ 10.0K | 50.0 ~ 22.0K |

| Circuit Symbol | D | E |
|-----------------------------------|---|--|
| TSOP 16 Circuit Layout Options |  |  |
| Resistance Range (Ω) | 50.0 ~ 22K | 500 ~ 10.0K |

PERFORMANCE

| TEST | TEST METHOD | REQUIREMENTS |
|-------------------------------|---|----------------------------|
| Operating Temperature Range | | -55°C ~ 155°C |
| Short Time Overload | 2.5 x rated voltage for 5 seconds | ± (0.02% + 0.01 Ω) |
| Temperature Cycle | -55°C ~ 155°C for 5 cycles | ± (0.02% + 0.01 Ω) |
| Resistance to Solder Heat | 250°C for 10 seconds | ± (0.02% + 0.01 Ω) |
| Moisture Resistance Load Life | 40°C, 90 ~ 95% R.H. rated voltage, 1,000 hours | ± (0.02% + 0.01 Ω) |
| Load Life at 70°C | 70°C, rated voltage, 1.5 hours on, 0.5 hours off, 1,000 hours | ± (0.02% + 0.01 Ω) |