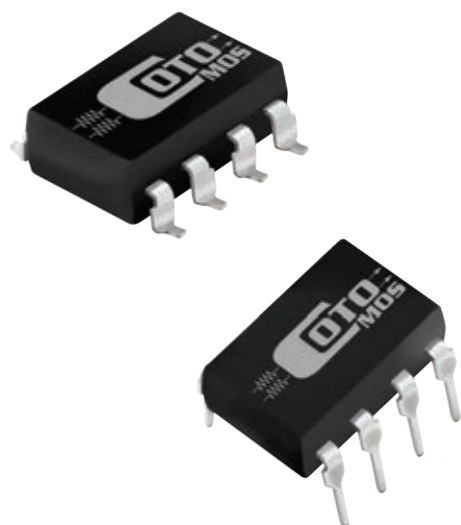


## CotoMOS CT334/CS334

The CT334 and CS334 feature current switching capability to 180mA with a low on resistance of 8Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 200V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through [www.cotorelay.com](http://www.cotorelay.com).

## CT334/CS334 Features

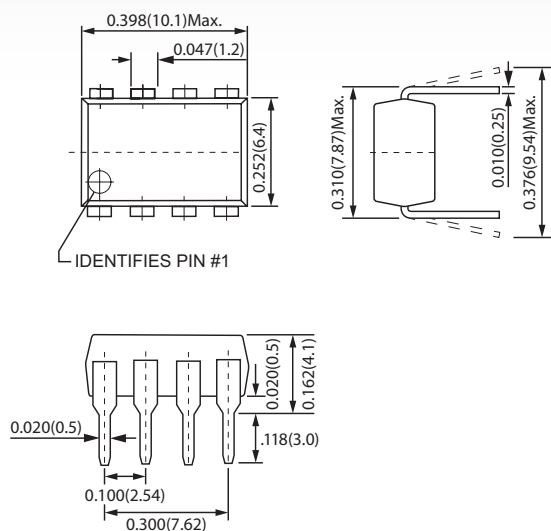
- ▶ Contact Form: 2a
- ▶ Load Voltage: 200V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 180mA Maximum
- ▶ On-Resistance: 8Ω Maximum
- ▶ Low Off-State Leakage Current: 1.0μA Maximum
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix -H for I/O Breakdown Voltage: 5000Vrms Minimum



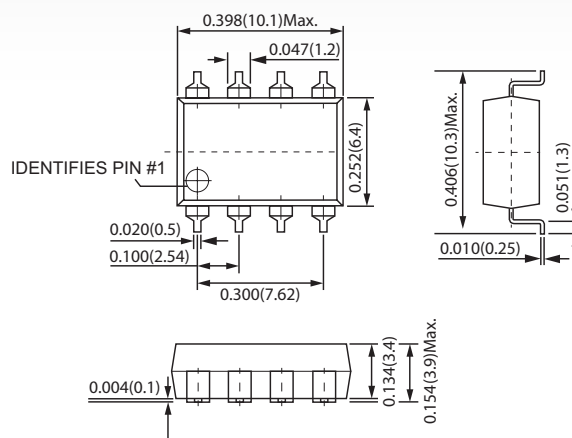
## DIMENSIONS

*in Inches (Millimeters)*

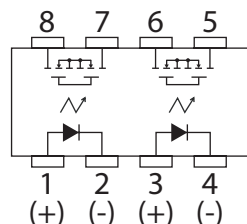
CT334



CS334



## TERMINAL IDENTIFICATION



1,3: Anode (LED)  
2,4: Cathode (LED)

5,6,7,8: Drain  
(MOSFET)

## CT334/CS334 MAXIMUM RATINGS (Ambient Temperature: 25°C)

| Parameters                   | Symbol            | Units | Value                |
|------------------------------|-------------------|-------|----------------------|
| <b>INPUT SPECIFICATIONS</b>  |                   |       |                      |
| Continuous LED Current       | I <sub>F</sub>    | mA    | 50mA                 |
| Peak LED Current             | I <sub>FP</sub>   | mA    | 500mA                |
| LED Reverse Voltage          | V <sub>R</sub>    | V     | 5V                   |
| Input Power Dissipation      | P <sub>in</sub>   | mW    | 75mW                 |
| <b>OUTPUT SPECIFICATIONS</b> |                   |       |                      |
| Load Voltage                 | V <sub>L</sub>    | V     | 200V (AC peak or DC) |
| Load Current                 | I <sub>L</sub>    | A     | 180mA                |
| Peak Load Current            | I <sub>Peak</sub> | A     | 0.8A                 |
| Output Power Dissipation     | P <sub>Out</sub>  | mW    | 600mW                |
| <b>RELAY SPECIFICATIONS</b>  |                   |       |                      |
| Total Power Dissipation      | P <sub>T</sub>    | mW    | 650mW                |
| I/O Breakdown Voltage        | V <sub>I/O</sub>  | V     | 1500Vrms             |
| Operating Temperature        | T <sub>Opr</sub>  |       | -40°C ~ +85°C        |
| Storage Temperature          | T <sub>Stg</sub>  |       | -40°C ~ +100°C       |

## CT334/CS334 ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)

| Parameters                   | Symbol             | Test Conditions                                                              | Units | Min             | Typ  | Max |
|------------------------------|--------------------|------------------------------------------------------------------------------|-------|-----------------|------|-----|
| INPUT                        |                    |                                                                              |       |                 |      |     |
| LED Forward Voltage          | V <sub>F</sub>     | I <sub>F</sub> =10mA                                                         | V     | 1.0             |      | 1.5 |
| Operation LED Current        | I <sub>F On</sub>  |                                                                              | mA    |                 | 0.9  | 3.0 |
| Recovery LED Voltage         | V <sub>F Off</sub> |                                                                              | V     | 0.5             |      |     |
| OUTPUT                       |                    |                                                                              |       |                 |      |     |
| On-Resistance Drain to Drain | R <sub>On</sub>    | I <sub>F</sub> =5mA, I <sub>L</sub> =Rating<br>Time to flow is within 1 sec. | Ω     |                 | 6.0  | 8.0 |
| Off-State Leakage Current    | I <sub>Leak</sub>  | V <sub>L</sub> =200V                                                         | μA    |                 |      | 1.0 |
| Output Capacitance           | C <sub>Out</sub>   | V <sub>L</sub> =0V, f=1MHz                                                   | pF    |                 | 130  |     |
| TRANSMISSION                 |                    |                                                                              |       |                 |      |     |
| Turn-On Time                 | T <sub>On</sub>    | I <sub>F</sub> =10mA, I <sub>L</sub> =Rating                                 | ms    |                 | 0.2  | 1.0 |
| Turn-Off Time                | T <sub>Off</sub>   |                                                                              | ms    |                 | 0.05 | 1.0 |
| COUPLED                      |                    |                                                                              |       |                 |      |     |
| I/O Insulation Resistance    | R <sub>I/O</sub>   |                                                                              | Ω     | 10 <sup>9</sup> |      |     |
| I/O Capacitance              | C <sub>I/O</sub>   | f=1MHz                                                                       | pF    |                 | 1.3  |     |

### Environmental Ratings:

Operating Temp: -40°C to +85° C; Storage Temp: -40 to +100 C.

All electrical parameters measured at 25° C unless otherwise specified.