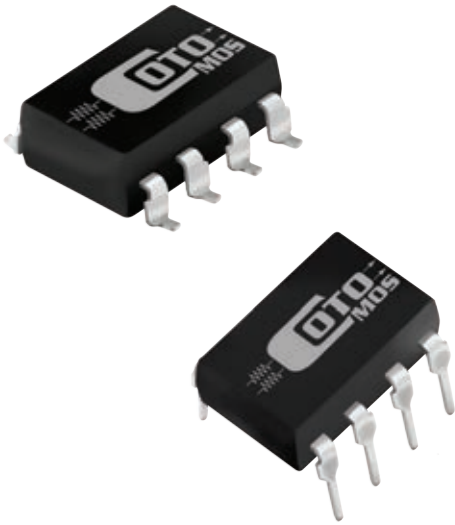


CotoMOS CT674/CS674

The CT674 and CS674 feature current switching capability to 80mA with a low on resistance of 50Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 400V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through www.cotorelay.com.

CT674/CS674 Features

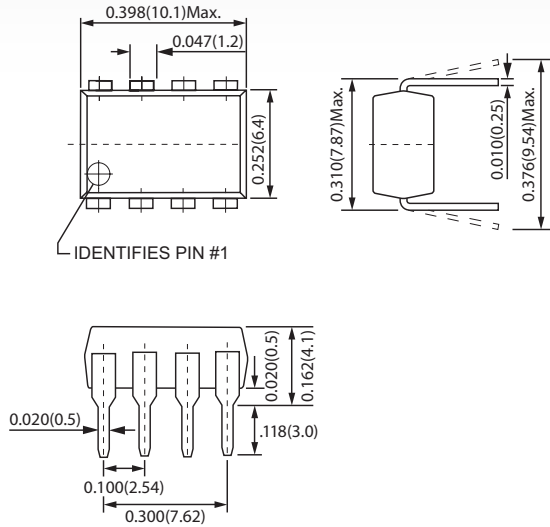
- ▶ Contact Form: 2b
- ▶ Load Voltage: 400V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 80mA Maximum
- ▶ On-Resistance: 50Ω Maximum
- ▶ Low Off-State Leakage Current: 10μA Maximum
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix -H for I/O Breakdown Voltage: 5000Vrms Minimum



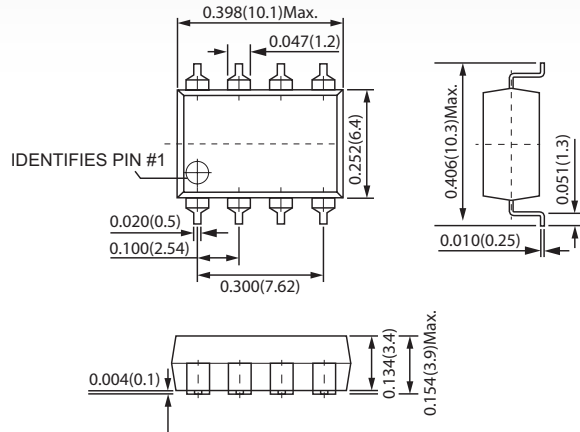
DIMENSIONS

in Inches (Millimeters)

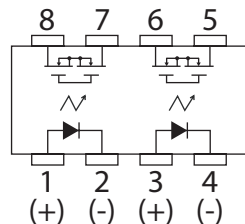
CT674



CS674



TERMINAL IDENTIFICATION



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

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

| CT674/CS674 MAXIMUM RATINGS (Ambient Temperature: 25°C) | | | |
|---|-------------------|-------|----------------------|
| Parameters | Symbol | Units | Value |
| INPUT SPECIFICATIONS | | | |
| Continuous LED Current | I _F | mA | 50mA |
| Peak LED Current | I _{FP} | mA | 500mA |
| LED Reverse Voltage | V _R | V | 5V |
| Input Power Dissipation | P _{in} | mW | 75mW |
| OUTPUT SPECIFICATIONS | | | |
| Load Voltage | V _L | V | 400V (AC peak or DC) |
| Load Current | I _L | A | 80mA |
| Peak Load Current | I _{Peak} | A | 0.6A |
| Output Power Dissipation | P _{Out} | mW | 600mW |
| RELAY SPECIFICATIONS | | | |
| Total Power Dissipation | P _T | mW | 650mW |
| I/O Breakdown Voltage | V _{I/O} | V | 1500Vrms |
| Operating Temperature | T _{Opr} | | -40°C ~ +85°C |
| Storage Temperature | T _{Stg} | | -40°C ~ +100°C |

| CT674/CS674 ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C) | | | | | | |
|---|--------------------|---|-------|-----------------|------|-----|
| Parameters | Symbol | Test Conditions | Units | Min | Typ | Max |
| INPUT | | | | | | |
| LED Forward Voltage | V _F | I _F =10mA | V | 1.0 | | 1.5 |
| Operation LED Current | I _{F On} | | mA | | 0.9 | 3.0 |
| Recovery LED Voltage | V _{F Off} | | V | 0.5 | | |
| OUTPUT | | | | | | |
| On-Resistance Drain to Drain | R _{On} | I _F =10mA, I _L =Rating Time to flow is within 1 sec. | Ω | | 30 | 50 |
| Off-State Leakage Current | I _{Leak} | V _L =400V | μA | | | 10 |
| Output Capacitance | C _{Out} | V _L =0V, f=1MHz | pF | | 165 | |
| TRANSMISSION | | | | | | |
| Turn-On Time | T _{On} | I _F =10mA, I _L =Rating | ms | | 0.35 | 2.0 |
| Turn-Off Time | T _{Off} | | ms | | 0.05 | 1.0 |
| COUPLED | | | | | | |
| I/O Insulation Resistance | R _{I/O} | | Ω | 10 ⁹ | | |
| I/O Capacitance | C _{I/O} | 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.