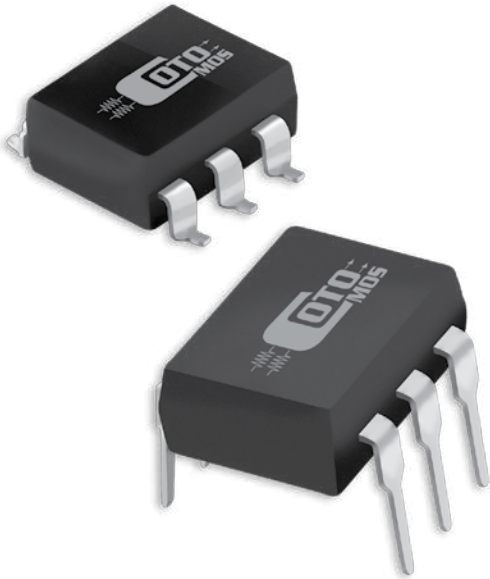


CotoMOS[®] CT137/CS137

The CT137 and CS137 combine Coto quality and economy in an industry standard 6 pin DIP package. Both the CT137 and the CS137 offer low on resistance. The CT137 utilizes a thru hole lead configuration, while the CS137 offers a surface mount option when the application requires it. Both relays are ideally suited to the needs of Test and Measurement, Industrial, and Telecommunications.

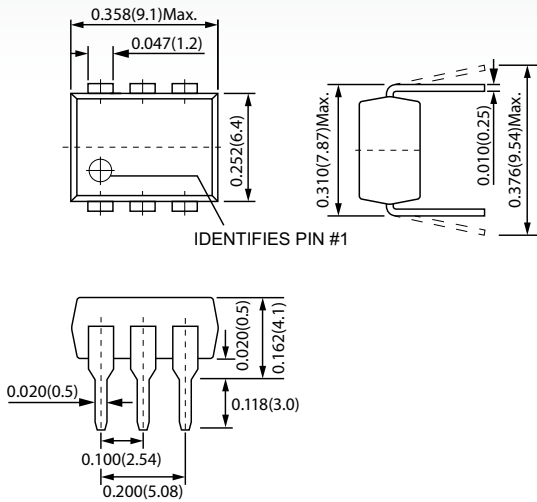
CT137/CS137 Features

- ▶ Contact Form: 1A
- ▶ Load Voltage: 60V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 400mA Maximum
- ▶ On-Resistance: 1.6Ω Maximum
- ▶ Low Off-State Leakage Current: 1.0μA Maximum
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix - H for I/O Breakdown Voltage: 5000Vrms Minimum

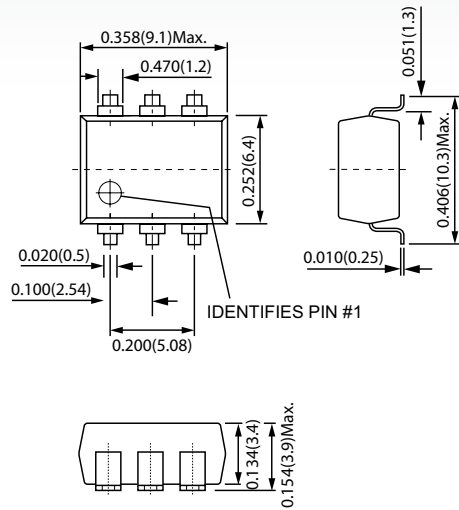


DIMENSIONS
in Inches (Millimeters)

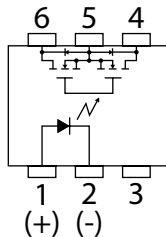
CT137



CS137



TERMINAL IDENTIFICATION



| | |
|------------------|----------------------|
| 1: Anode (LED) | 4,6: Drain (MOS FET) |
| 2: Cathode (LED) | 5: Source (MOS FET) |
| 3: NC | |

CT137/CS137 MAXIMUM RATINGS (Ambient Temperature: 25°C)

| Parameters | Symbol | Units | Value |
|------------------------------|-------------------|-------------------|------------|
| INPUT SPECIFICATIONS | | | |
| Continuous LED Current | I _F | mA | 50 |
| Peak LED Current | I _{FP} | mA | 500 |
| LED Reverse Voltage | V _R | V | 5 |
| Input Power Dissipation | P _{in} | mW | 75 |
| OUTPUT SPECIFICATIONS | | | |
| Load Voltage | V _L | V (AC peak or DC) | 60 |
| Load Current | I _L | mA | 400 |
| Peak Load Current | I _{Peak} | A | 2.0 |
| Output Power Dissipation | P _{Out} | mW | 450 |
| RELAY SPECIFICATIONS | | | |
| Total Power Dissipation | P _T | mW | 500 |
| I/O Breakdown Voltage | V _{I/O} | V _{rms} | 1500 |
| Operating Temperature | T _{Opr} | °C | -40 ~ +85 |
| Storage Temperature | T _{Stg} | °C | -40 ~ +100 |

CT137/CS137 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 =5mA, I _L =Rating Time to flow is within 1 sec. | Ω | | 0.8 | 1.6 |
| Off-State Leakage Current | I _{Leak} | V _L =60V | μA | | | 1.0 |
| Output Capacitance | C _{Out} | V _L =0V, f=1MHz | pF | | 195 | |
| TRANSMISSION | | | | | | |
| Turn-On Time | T _{On} | I _F =10mA, I _L =Rating | ms | | 0.3 | 1.0 |
| 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.