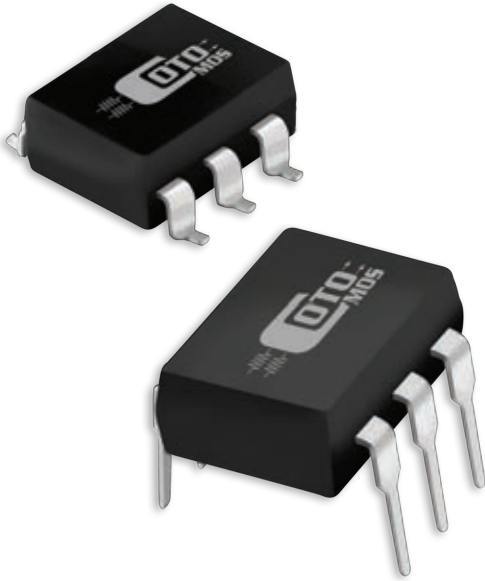


## CotoMOS CT137/CS137

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



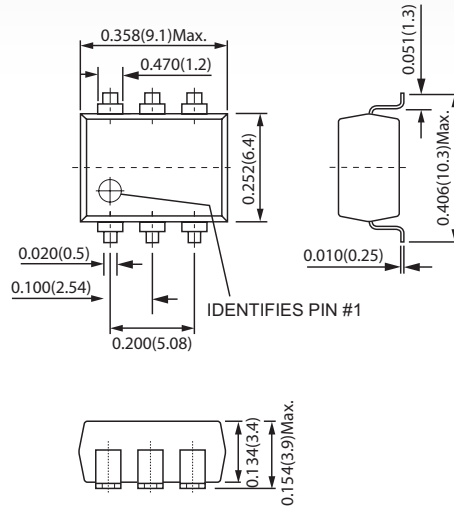
## DIMENSIONS

*in Inches (Millimeters)*

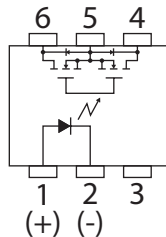
CT137



CS137



### TERMINAL IDENTIFICATION



1: Anode (LED)  
2: Cathode (LED)  
3: NC

4,6: Drain (MOS FET)  
5: Source (MOS FET)

CT137/CS137 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	60V (AC peak or DC)
Load Current	I <sub>L</sub>	A	400mA
Peak Load Current	I <sub>Peak</sub>	A	2.0A
Output Power Dissipation	P <sub>Out</sub>	mW	450mW
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	500mW
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

CT137/CS137 ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)						
Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
<b>INPUT</b>						
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		
<b>OUTPUT</b>						
On-Resistance Drain to Drain	R <sub>On</sub>	I <sub>F</sub> =5mA, I <sub>L</sub> =Rating Time to flow is within 1 sec.	Ω		0.8	1.6
Off-State Leakage Current	I <sub>Leak</sub>	V <sub>L</sub> =60V	μA			1.0
Output Capacitance	C <sub>Out</sub>	V <sub>L</sub> =0V, f=1MHz	pF		195	
<b>TRANSMISSION</b>						
Turn-On Time	T <sub>On</sub>	I <sub>F</sub> =10mA, I <sub>L</sub> =Rating	ms		0.3	1.0
Turn-Off Time	T <sub>Off</sub>		ms		0.05	1.0
<b>COUPLED</b>						
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.