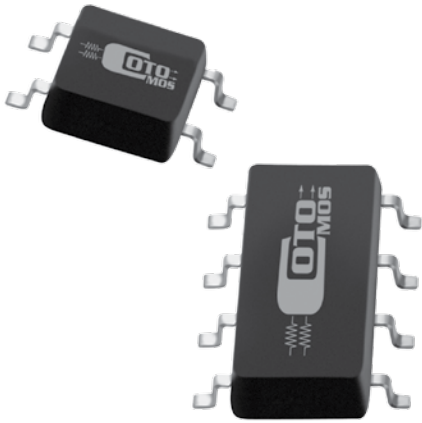


## CotoMOS® C237S/C337S

When small size and high performance are needed, the SOP package, such as the C237S or C337S, is the industry choice. Both the C237S and the C337S feature low on resistance and fast turn on time. In addition, the C337S offers two fully-independent form A channels for further space savings. Both relays are ideally suited to the needs of Test and Measurement, Industrial, and Telecommunications.



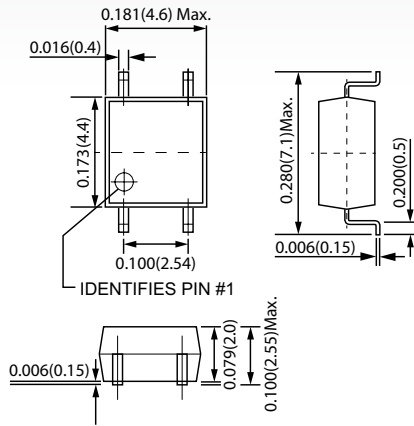
### C237S/C337S Features

- ▶ Contact Form: C237S: 1A / C337S: 2A
- ▶ Load Voltage: 60V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: C237S: 350mA Maximum / C337S: 320mA Maximum
- ▶ On-Resistance: 1.6Ω Maximum
- ▶ Output Capacitance: 195pF Typical
- ▶ Low Off-State Leakage Current: 1.0μA Maximum

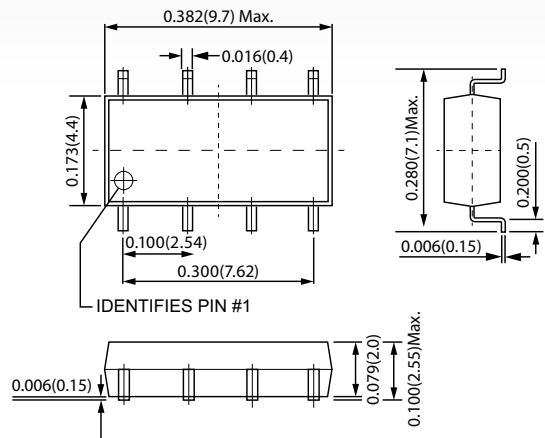
## DIMENSIONS

*in Inches (Millimeters)*

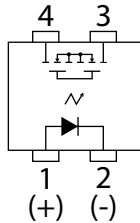
C237S



C337S



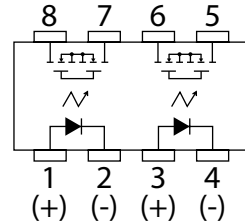
### TERMINAL IDENTIFICATION



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

3,4: Drain (MOSFET)

### TERMINAL IDENTIFICATION



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

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

<b>C237S/C337S MAXIMUM RATINGS (Ambient Temperature: 25°C)</b>			
Parameters	Symbol	Units	Value
<b>INPUT SPECIFICATIONS</b>			
Continuous LED Current	I <sub>F</sub>	mA	50
Peak LED Current	I <sub>FP</sub>	mA	500
LED Reverse Voltage	V <sub>R</sub>	V	5
Input Power Dissipation	P <sub>in</sub>	mW	75
<b>OUTPUT SPECIFICATIONS</b>			
Load Voltage	V <sub>L</sub>	V (AC peak or DC)	60
Load Current	I <sub>L</sub>	mA	350 (1Ch) / 320 (2Ch)
Peak Load Current	I <sub>Peak</sub>	A	2.0
Output Power Dissipation	P <sub>Out</sub>	mW	200 (1Ch) / 400 (2Ch)
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	225 (1Ch) / 450 (2Ch)
I/O Breakdown Voltage	V <sub>I/O</sub>	V <sub>rms</sub>	1500
Operating Temperature	T <sub>Opr</sub>	°C	-40 ~ +85
Storage Temperature	T <sub>Stg</sub>	°C	-40 ~ +100

<b>C237S/C337S ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)</b>						
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> =5mA, I <sub>L</sub> =Rating	ms		0.35	1.5
Turn-Off Time	T <sub>Off</sub>		ms		0.05	0.2
<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.

# 37 SERIES GRAPHS

