

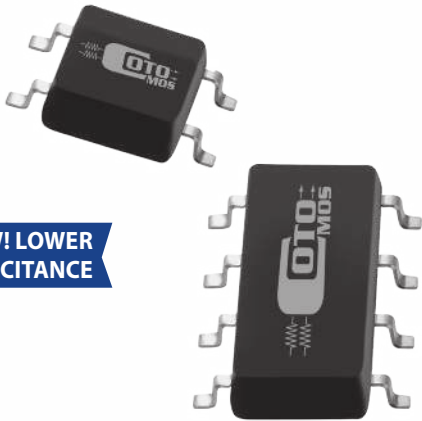
## CotoMOS® C230S/C330S

When small size and high performance are needed, the SOP package, such as the C230S or C330S, is the industry choice. Both the C230S and the C330S feature high load voltage capability and the opportunity for efficient board layout, saving precious board space without compromising on performance. In addition, the C330S 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.

### C230S/C330S Features

- ▶ Contact Form: C230S: 1A / C330S: 2A
- ▶ Load Voltage: 400V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: C230S: 100mA Maximum / C330S: 85mA Maximum
- ▶ On-Resistance: 21Ω Typical
- ▶ Output Capacitance: 55pF Typical
- ▶ Low Off-State Leakage Current: 1.0μA Maximum

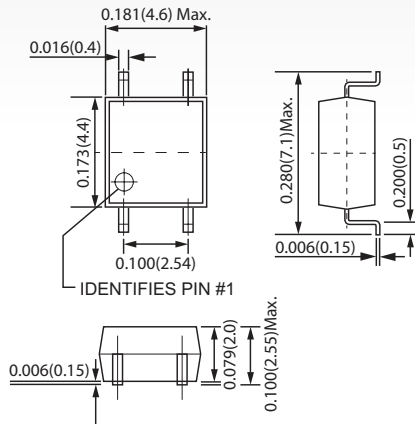
**NEW! LOWER CAPACITANCE**



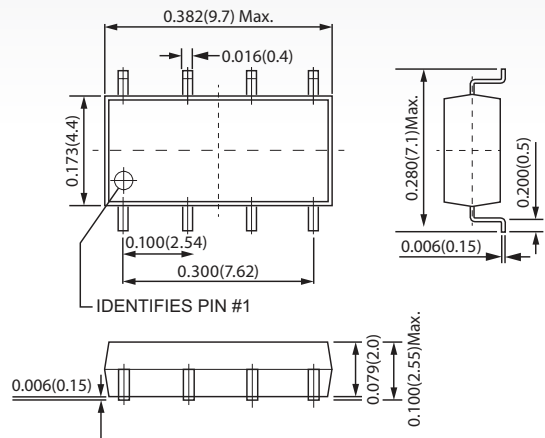
## DIMENSIONS

*in Inches (Millimeters)*

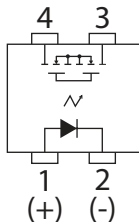
C230S



C330S



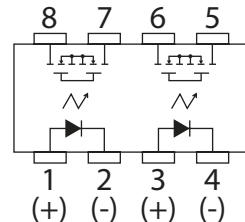
### TERMINAL IDENTIFICATION



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>C230S/C330S 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)	400
Load Current	I <sub>L</sub>	mA	100 (1Ch) / 85 (2Ch)
Peak Load Current	I <sub>Peak</sub>	A	0.6
Output Power Dissipation	P <sub>Out</sub>	mW	300 (1Ch) / 450 (2Ch)
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	350 (1Ch) / 500 (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>C230S/C330S 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	1.17	1.5
Operation LED Current	I <sub>F On</sub>		mA		0.65	3.0
Recovery LED Voltage	V <sub>F Off</sub>		V	0.5	1.0	
<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		21	30
Off-State Leakage Current	I <sub>Leak</sub>	V <sub>L</sub> =400V	μA			1.0
Output Capacitance	C <sub>Out</sub>	V <sub>L</sub> =0V, f=1MHz	pF		55	
<b>TRANSMISSION</b>						
Turn-On Time	T <sub>On</sub>	I <sub>F</sub> =5mA, I <sub>L</sub> =Rating	ms		0.2	0.5
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.

# 30 SERIES GRAPHS

