

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.

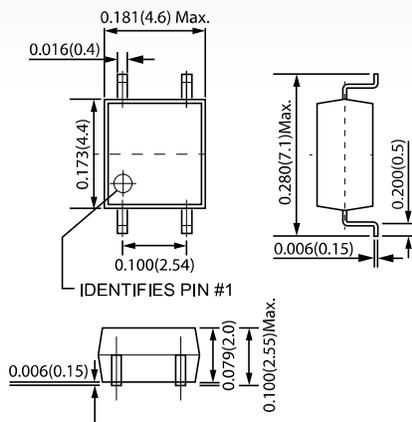
C230S/C330S Features

- ▶ 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: 24Ω Typical
- ▶ Output Capacitance: 115pF Typical
- ▶ Low Off-State Leakage Current: 1.0μA Maximum

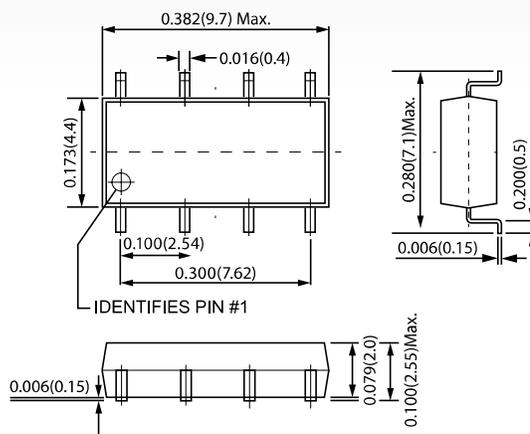
DIMENSIONS

in Inches (Millimeters)

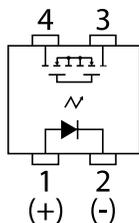
C230S



C330S



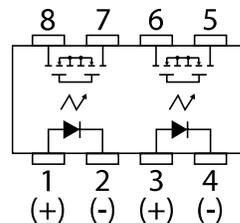
TERMINAL IDENTIFICATION



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)

C230S/C330S 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)	400
Load Current	I_L	mA	100 (1Ch) / 85 (2Ch)
Peak Load Current	I_{Peak}	A	0.6
Output Power Dissipation	P_{Out}	mW	300 (1Ch) / 450 (2Ch)
RELAY SPECIFICATIONS			
Total Power Dissipation	P_T	mW	350 (1Ch) / 500 (2Ch)
I/O Breakdown Voltage	$V_{I/O}$	V _{rms}	1500
Operating Temperature	T_{Opr}	°C	-40 ~ +85
Storage Temperature	T_{Stg}	°C	-40 ~ +100

C230S/C330S 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		24	30
Off-State Leakage Current	I_{Leak}	$V_L=400V$	μA			1.0
Output Capacitance	C_{Out}	$V_L=0V, f=1MHz$	pF		115	
TRANSMISSION						
Turn-On Time	T_{On}	$I_F=5mA, I_L=Rating$	ms		0.25	0.5
Turn-Off Time	T_{Off}		ms		0.02	0.2
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.