



# C770S / CT770 / CS770

## CotoMOS® C770S / CT770 / CS770

The C770S / CT770 / CS770 features current switching capability to 380mA with a low on resistance of 1.6Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 60V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through [www.cotorelay.com](http://www.cotorelay.com).

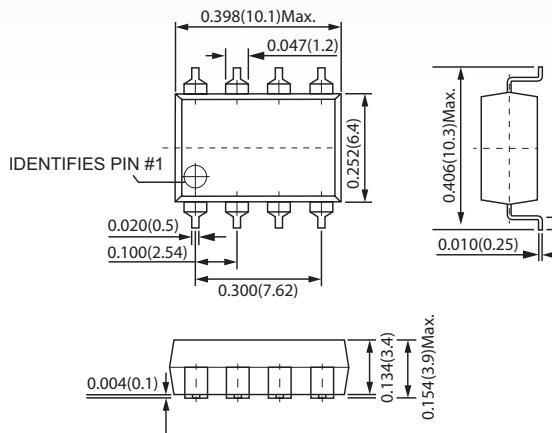
## C770S / CT770 / CS770 Features

- ▶ Contact Form: 1A+1B
- ▶ Load Voltage: 60V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 380mA Maximum
- ▶ On-Resistance: 1.6Ω Maximum
- ▶ Output Capacitance: 45pF Typical (NO), 165 pF (NC) Typical
- ▶ Low Off-State Leakage Current: 1µ A (NO), 10µ A (NC) Maximum

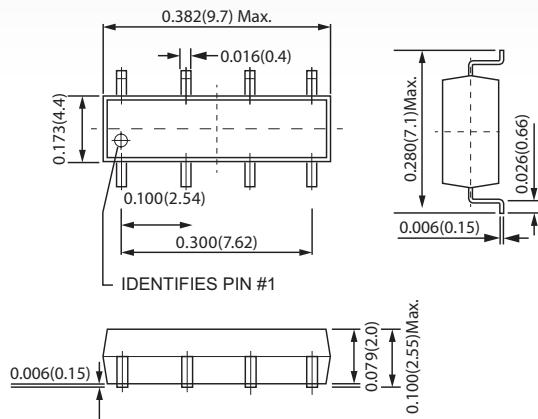
## DIMENSIONS

*in Inches (Millimeters)*

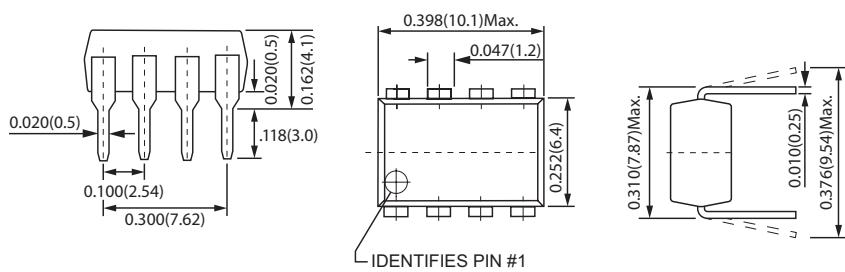
CS770



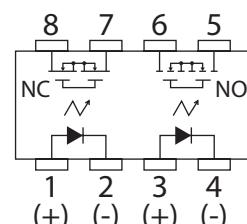
C770S



CT770



## TERMINAL IDENTIFICATION



1,3: Anode (LED)	5,6,7,8: Drain (MOSFET)
2,4: Cathode (LED)	

## C770S / CT770 / CS770 MAXIMUM RATINGS (Ambient Temperature: 25°C)

Parameters	Symbol	Units	Value (SOP 8 / DIP 8, SMD 8)
<b>INPUT SPECIFICATIONS</b>			
Continuous LED Current	I <sub>F</sub>	mA	50
Peak LED Current (f=100 Hz Duty=1%)	I <sub>FP</sub>	mA	1000
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 / 380
Peak Load Current (1 ms, 1 shot)	I <sub>Peak</sub>	mA	1000
Output Power Dissipation	P <sub>out</sub>	mW	400 / 600
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	450 / 650
I/O Breakdown Voltage	V <sub>I/O</sub>	Vrms	1500
Operating Temperature	T <sub>opr</sub>	°C	-40 ~ +85
Storage Temperature	T <sub>Stg</sub>	°C	-40 ~ +100

## C770S / CT770 / CS770 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	1.17	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	1.0	
<b>OUTPUT</b>						
On-Resistance Drain to Drain	R <sub>on</sub>	I <sub>F</sub> =5mA (NO), I <sub>L</sub> =0mA (NC), I <sub>L</sub> =Rating Time to flow is within 1 sec.	Ω		0.75	1.6
Off-State Leakage Current	I <sub>Leak</sub>	I <sub>F</sub> =0mA (NO), I <sub>F</sub> =5mA (NC), V <sub>L</sub> =60V, f=1MHz	μA			1 (NO) 10 (NC)
Output Capacitance	C <sub>out</sub>	I <sub>F</sub> =0mA (NO), I <sub>F</sub> =5mA (NC) V <sub>L</sub> =0V, f=1MHz	pF		45 (NO) 165 (NC)	
<b>TRANSMISSION</b>						
Operate Time	T <sub>on</sub> (NO) T <sub>off</sub> (NC)	I <sub>F</sub> =5mA, I <sub>L</sub> =Rating (for SOP type)	ms		0.2 (NO) 0.35 (NC)	2.0
Recovery Time	T <sub>off</sub> (NO) T <sub>on</sub> (NC)	I <sub>F</sub> =5mA, I <sub>L</sub> =Rating (for SOP type)	ms		0.05	1.0
Operate Time	T <sub>on</sub> (NO) T <sub>off</sub> (NC)	I <sub>F</sub> =10mA, I <sub>L</sub> =Rating (for DIP/SMD type)	ms		0.2 (NO) 0.25 (NC)	2.0
Recovery Time	T <sub>off</sub> (NO) T <sub>on</sub> (NC)	I <sub>F</sub> =10mA, I <sub>L</sub> =Rating (for DIP/SMD type)	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.

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