

CotoMOS CT774/CS774

The CT774 and CS774 feature current switching capability to 80/100mA with a low on resistance of 30/50Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 400V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through www.cotorelay.com.

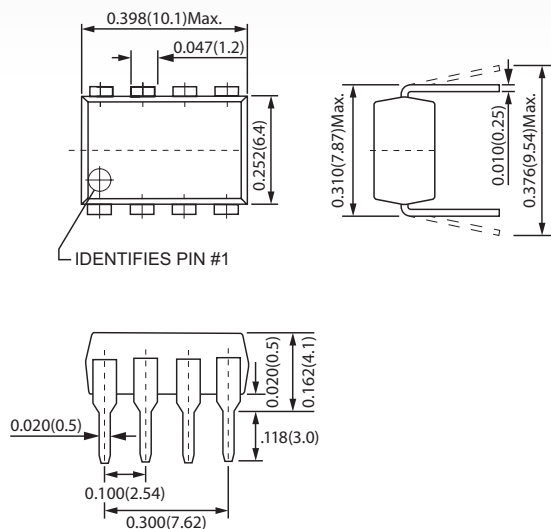
CT774/CS774 Features

- ▶ Contact Form: 1a+1b
- ▶ Load Voltage: 400V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 100mA Maximum (NO) 80mA Maximum (NC)
- ▶ On-Resistance: 30Ω Maximum (NO) 50Ω Maximum (NC)
- ▶ Low Off-State Leakage Current: 1.0μA Maximum (NO) 10μA Maximum (NC)
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix -H for I/O Breakdown Voltage: 5000Vrms Minimum

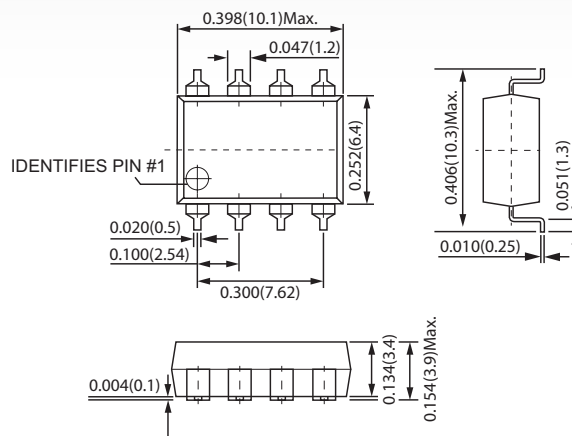
DIMENSIONS

in Inches (Millimeters)

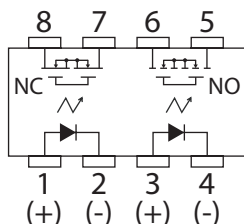
CT774



CS774



TERMINAL IDENTIFICATION



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

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

CT774/CS774 MAXIMUM RATINGS (Ambient Temperature: 25°C)

Parameters	Symbol	Units	Value
INPUT SPECIFICATIONS			
Continuous LED Current	I _F	mA	50mA
Peak LED Current	I _{FP}	mA	500mA
LED Reverse Voltage	V _R	V	5V
Input Power Dissipation	P _{in}	mW	75mW
OUTPUT SPECIFICATIONS			
Load Voltage	V _L	V	400V (AC peak or DC)
Load Current	I _L	A	100mA (NO) 80mA (NC)
Peak Load Current	I _{Peak}	A	0.4A
Output Power Dissipation	P _{Out}	mW	600mW
RELAY SPECIFICATIONS			
Total Power Dissipation	P _T	mW	650mW
I/O Breakdown Voltage	V _{I/O}	V	1500Vrms
Operating Temperature	T _{Opr}		-40°C ~ +85°C
Storage Temperature	T _{Stg}		-40°C ~ +100°C

CT774/CS774 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 =1mA(NO), I _L =Rating Time to flow is within 1 sec.	Ω		24(NO) 30(NC)	30(NO) 50(NC)
Off-State Leakage Current	I _{Leak}	I _F =0mA (NO), I _F =5mA (NC), V _L =400V	μA			1(NO) 10(NC)
Output Capacitance	C _{Out}	I _F =0mA (NO), I _F =5mA (NC), V _L =0V, f=1MHz	pF		115(NO) 165(NC)	
TRANSMISSION						
Turn-On Time	T _{On}	I _F =0mA → 10mA (NC), I _F =Rating	ms		0.2(NO) 0.35(NC)	2.0
Turn-Off Time	T _{Off}	I _F =10mA → 0mA (NC), I _L =Rating	ms		0.05	1.0
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.