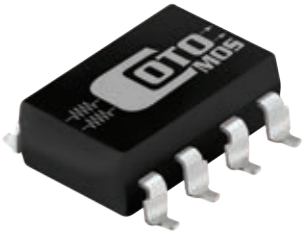


CotoMOS CT774/CS774

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.

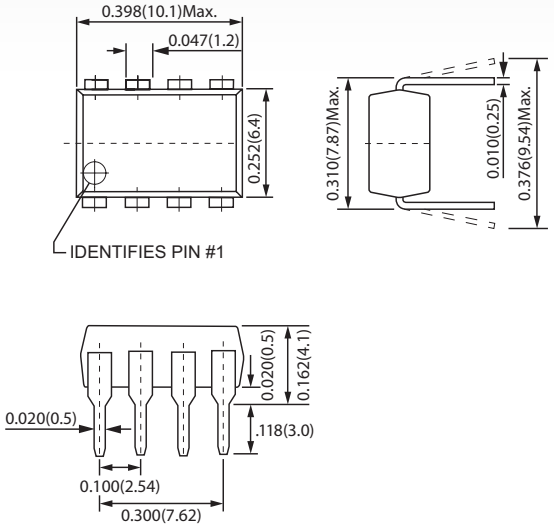
CT774/CS774 Features

- 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

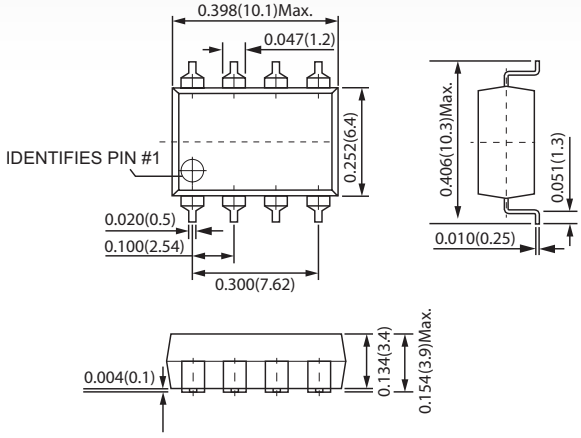
DIMENSIONS

in Inches (Millimeters)

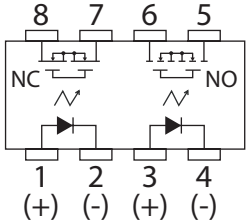
CT774



CS774



TERMINAL IDENTIFICATION



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

tel: (401) 943.2686 | fax: (401) 942.0920

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.