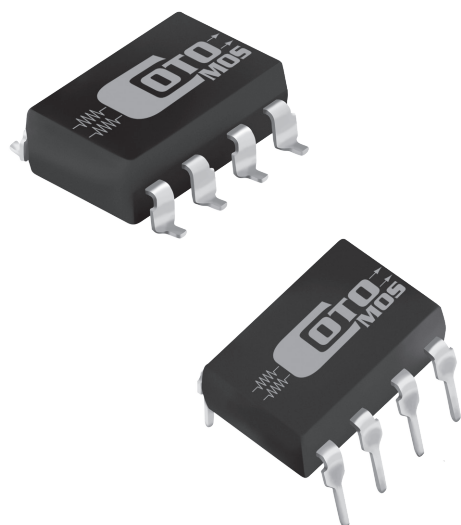


CotoMOS® CTA17/CSA17

The CTA17 and CSA17 feature current switching capability to 120mA with a low on resistance of 30Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 350V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through www.cotorelay.com.

CTA17/CSA17 Features

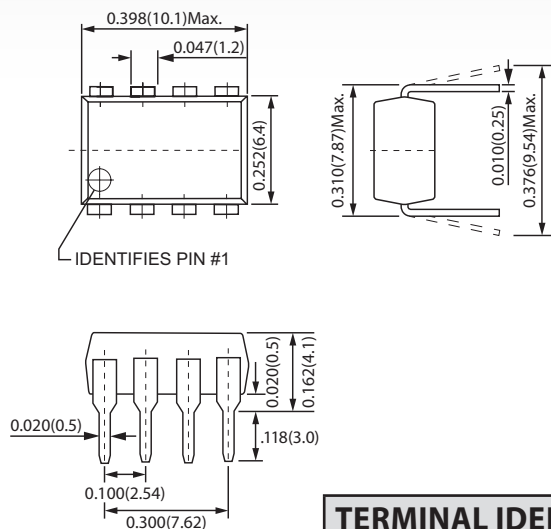
- ▶ Contact Form: 1A
- ▶ Load Voltage: 350V Minimum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 120mA Maximum
- ▶ On-Resistance: 30Ω Maximum
- ▶ Low Off-State Leakage Current: 1μA Maximum
- ▶ I/O Breakdown Voltage: 3750Vrms Minimum



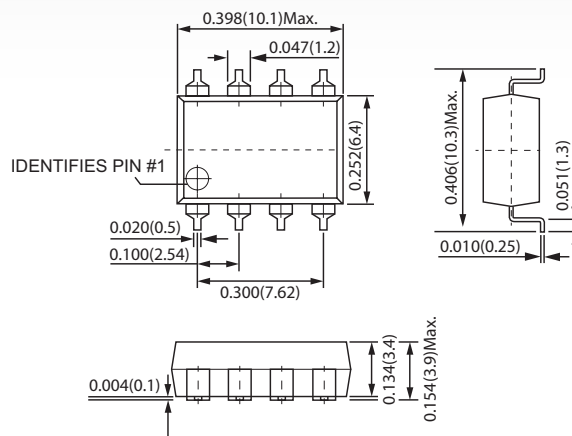
DIMENSIONS

in Millimeters

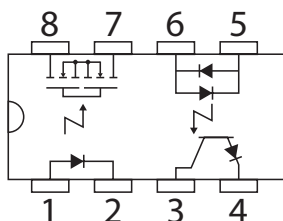
CTA17



CSA17



TERMINAL IDENTIFICATION



1: +LED - MOS Relay
2: -LED - MOS Relay
3: Collector - Phototransistor +/-
4: Emitter - Phototransistor +/-

5: LED - Phototransistor +/-
6: LED - Phototransistor +/-
7: Load - MOS Relay Output
8: Load - MOS Relay Output

CTA17/CSA17 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	1A
LED Reverse Voltage	V _R	V	5V
Input Power Dissipation	P _{in}	mW	150mW
OUTPUT SPECIFICATIONS			
Load Voltage	V _L	V	350V (AC peak or DC)
Load Current	I _L	A	120mA
Peak Load Current	I _{Peak}	A	350mA
Output Power Dissipation	P _{Out}	mW	450mW
RELAY SPECIFICATIONS			
Total Power Dissipation	P _T	mW	600mW
I/O Breakdown Voltage	V _{I/O}	V	3750Vrms

CTA17/CSA17 RELAY ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)							
	Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
Input Pin (1,2)	LED Forward Voltage	V _F	I _F =10mA	V	0.9	1.2	1.4
	Reverse Current	I _R	V _R =5V	uA			10
	Operation LED Current	I _{F On}		mA		0.7	3.0
	Recovery LED Voltage	V _{F Off}		V	0.5	1.1	
Output Pin (7,8)	Load Voltage (Peak)	V _L		V	350		
	Load Current (Continuous)	I _L		mA			120
	Peak Load Current	I _{Peak}		mA			350
	On-Resistance	R _{On}		Ω		19	30
	Off-State Leakage Current	I _{Leak}	V _L =350V	μA			1.0
TRANSMISSION							
	Turn-On Time	T _{On}	I _F =5mA, V _L =20V	ms		0.3	2.5
	Turn-Off Time	T _{Off}		ms		0.04	1.0
COUPLED							
	Output Capacitance	C _{Out}	f=1MHz	pF		115	

CTA17/CSA17 DETECTOR ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)							
	Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
Input Pin (5,6)	LED Forward Voltage	V _F	I _F =+/-10mA	V	0.9	1.2	1.5
Output Pin (3,4)	C-E Breakdown Voltage	V _{ceo}	I _c =0.1mA	V	35		
	E-C Breakdown Voltage	V _{ceo}	I _e =0.1mA	V	5		
	Collector Dark Current	I _{ceo}	V _{ce} =5V, I _F =0mA	nA			500
	Collector Saturation Voltage	V _{ce(sat)}	I _F =±16mA, I _c =2mA	V			0.5
	Current Transfer Ratio	CTR	I _F =±6mA, V _{ce} =0.5V	%	33		

Environmental Ratings:

Operating Temp: -40°C to +85°C; Storage Temp: -40°C to +120°C.
All electrical parameters measured at 25°C unless otherwise specified.