

## CotoMOS® CT130-C / CS130-C & CT130-HC / CS130-HC

The CT130-C, CS130-C, CT130-HC and CS130-HC 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 400V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through [www.cotorelay.com](http://www.cotorelay.com).

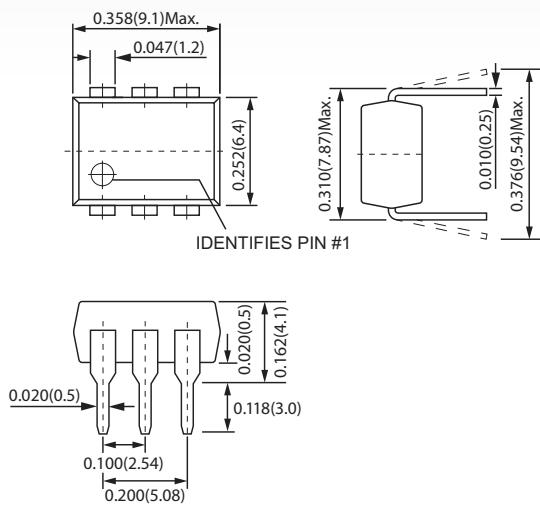
## CT130-C / CS130-C & CT130-HC / CS130-HC Features

- ▶ Contact Form: 1A
- ▶ Load Voltage: 400V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 120mA Maximum
- ▶ On-Resistance: 21Ω Typical
- ▶ Output Capacitance: 55pF Typ.
- ▶ Low Off-State Leakage Current: 1.0µA Maximum
- ▶ Suffix - H for I/O Breakdown Voltage: 5000Vrms Minimum
- ▶ Transient Current Limiting (Over-Current Protection): 180 mA Typ.

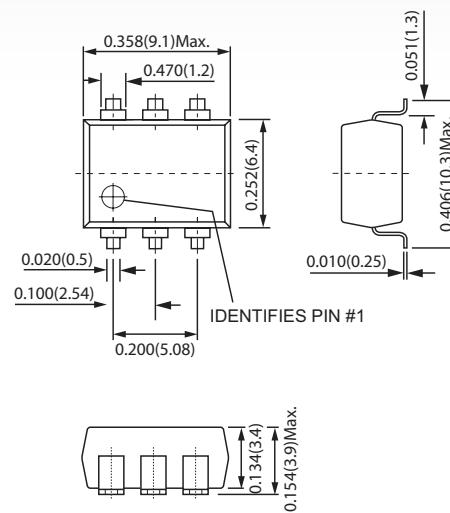
## DIMENSIONS

*in Inches (Millimeters)*

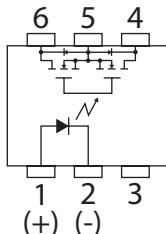
CT130-C/CT130-HC



CS130-C/CS130-HC



## TERMINAL IDENTIFICATION



1: Anode (LED) 2: Cathode (LED) 3: NC	4,6: Drain (MOS FET) 5: Source (MOS FET)
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## CT130-C / CS130-C & CT130-HC / CS130-HC MAXIMUM RATINGS (Ambient Temperature: 25°C)

Parameters	Symbol	Units	Value
<b>INPUT SPECIFICATIONS</b>			
Continuous LED Current	I <sub>F</sub>	mA	50
Peak LED Current (F=100Hz, duty=1%)	I <sub>FP</sub>	mA	500
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)	400
Load Current	I <sub>L</sub>	mA	120
Peak Load Current	I <sub>Peak</sub>	mA	600
Output Power Dissipation	P <sub>out</sub>	mW	450
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	500
I/O Breakdown Voltage	V <sub>I/O</sub>	Vrms	3750
Operating Temperature	T <sub>opr</sub>	°C	-40 ~ +85
Storage Temperature	T <sub>Stg</sub>	°C	-40 ~ +100

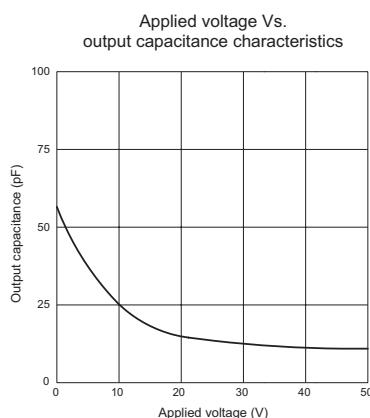
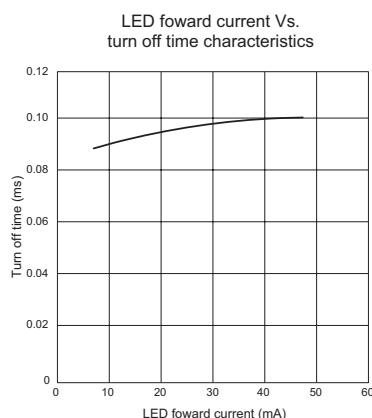
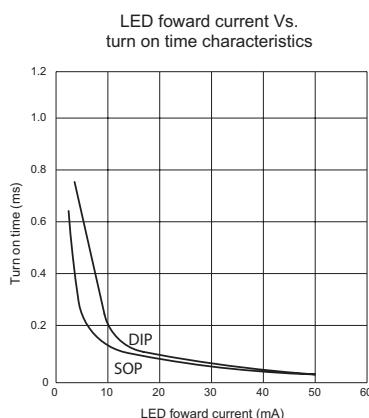
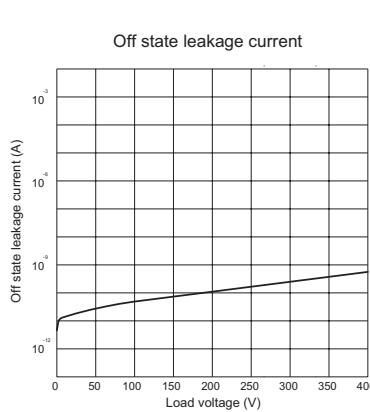
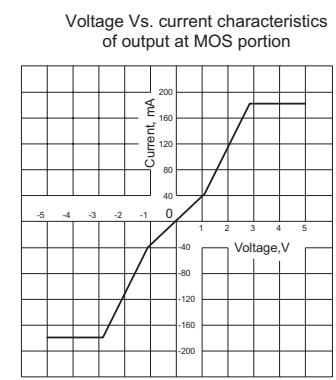
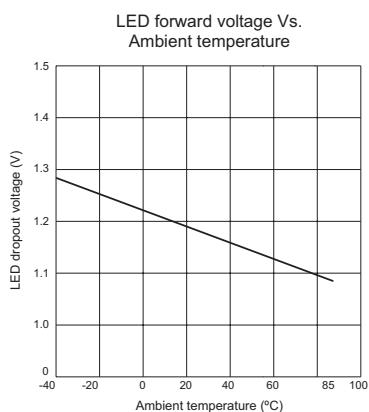
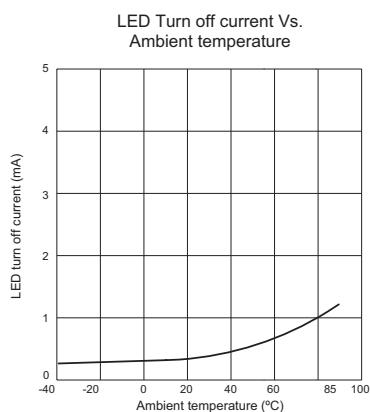
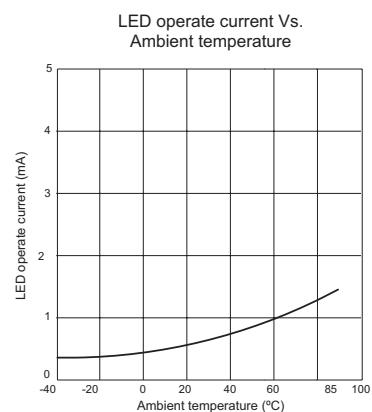
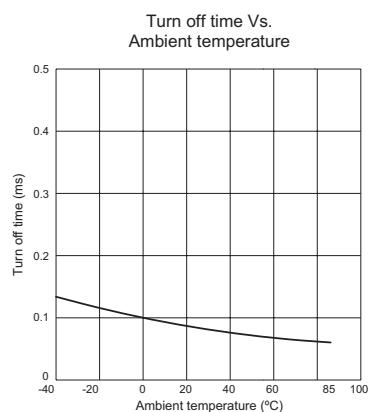
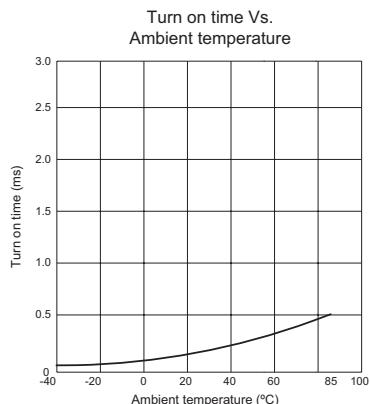
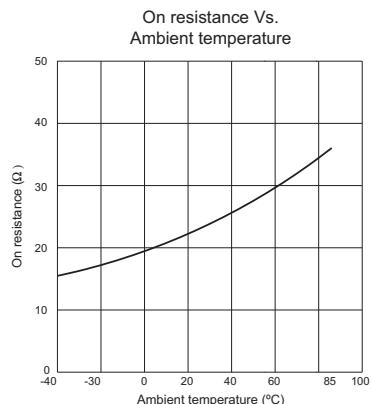
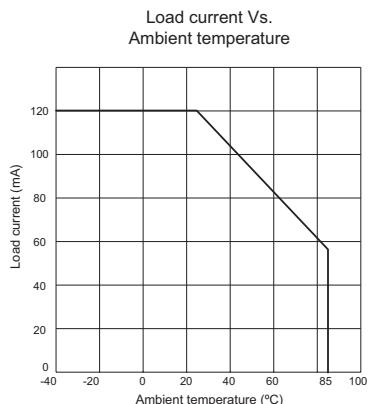
## CT130-C / CS130-C & CT130-HC / CS130-HC ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)

Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
<b>INPUT</b>						
LED Forward Voltage	V <sub>F</sub>	I=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, I <sub>L</sub> =Rating Time to flow is within 1 sec.	Ω	21	30	
Current Limit	I <sub>T</sub>	I <sub>F</sub> =5mA	mA	120	180	240
Off-State Leakage Current	I <sub>Leak</sub>	V <sub>L</sub> =400V	μA			1.0
Output Capacitance	C <sub>out</sub>	V <sub>L</sub> =0V, f=1MHz	pF	55		
<b>TRANSMISSION</b>						
Turn-On Time	T <sub>On</sub>		ms	0.2	1.0	
Turn-Off Time	T <sub>off</sub>	I <sub>F</sub> =10mA, I <sub>L</sub> =Rating	ms	0.1	0.5	
<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.

## 30-C/30-HC SERIES GRAPHS



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