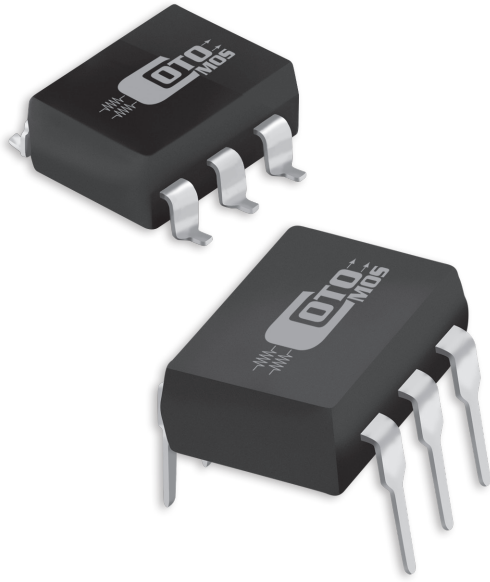


CotoMOS® CT128/CS128

The CT128 and CS128 feature high current switching capability to 4.5A with a low on resistance of 0.05Ω Maximum. Designed for ATE, Controls, or Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 40V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through www.cotorelay.com or email us at cotomos@cotorelay.com.

CT128/CS128 Features

- ▶ Contact Form: 1A
- ▶ Load Voltage: 40V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 4.5A Maximum
- ▶ On-Resistance: 0.05Ω Maximum
- ▶ Low Off-State Leakage Current: 10μA Maximum
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix - H for I/O Breakdown Voltage: 5000Vrms Minimum



DIMENSIONS

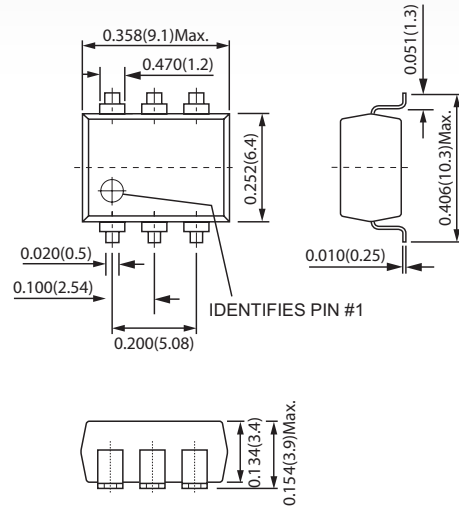
in Inches (Millimeters)

CT128



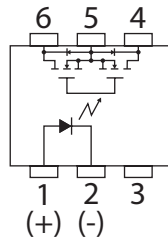
IDENTIFIES PIN #1

CS128



IDENTIFIES PIN #1

TERMINAL IDENTIFICATION



1: Anode (LED)
2: Cathode (LED)
3: NC

4,6: Drain (MOS FET)
5: Source (MOS FET)

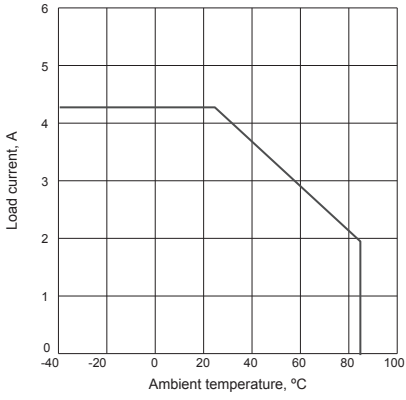
CT128/CS128 MAXIMUM RATINGS (Ambient Temperature: 25°C)			
Parameters	Symbol	Units	Value
INPUT SPECIFICATIONS			
Continuous LED Current	I _F	mA	50
Peak LED Current	I _{FP}	mA	500
LED Reverse Voltage	V _R	V	5
Input Power Dissipation	P _{in}	mW	75
OUTPUT SPECIFICATIONS			
Load Voltage	V _L	V (AC peak or DC)	40
Load Current	I _L	A	4.5
Peak Load Current	I _{Peak}	A	9.5
Output Power Dissipation	P _{Out}	mW	500
RELAY SPECIFICATIONS			
Total Power Dissipation	P _T	mW	550
I/O Breakdown Voltage	V _{I/O}	V _{rms}	1500
Operating Temperature	T _{Opr}	°C	-40 ~ +85
Storage Temperature	T _{Stg}	°C	-40 ~ +100

CT128/CS128 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	1.37	1.5
Operation LED Current	I _{F On}		mA		1.2	3.0
Recovery LED Voltage	V _{F Off}		V	0.5	1.2	
OUTPUT						
On-Resistance Drain to Drain	R _{On}	I _F =5mA, I _L =Rating Time to flow is within 1 sec.	Ω		0.033	0.05
Off-State Leakage Current	I _{Leak}	I _F =0mA, V _L =40V	μA			1.0
Output Capacitance	C _{Out}	V _L =0V, f=1MHz	pF		690	
TRANSMISSION						
Turn-On Time	T _{On}	I _F =10mA, I _L =Rating	ms		1.2	5.0
Turn-Off Time	T _{Off}		ms		0.05	2.0
COUPLED						
I/O Insulation Resistance	R _{I/O}		Ω	5*10 ⁹		
I/O Capacitance	C _{I/O}	f=1MHz	pF		1.0	

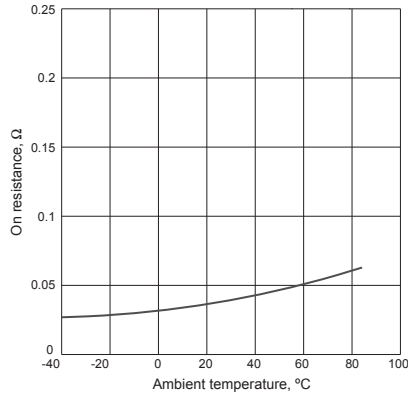
Environmental Ratings:

Operating Temp: -40°C to +85°C; Storage Temp: -40 to +100 C.
All electrical parameters measured at 25° C unless otherwise specified.

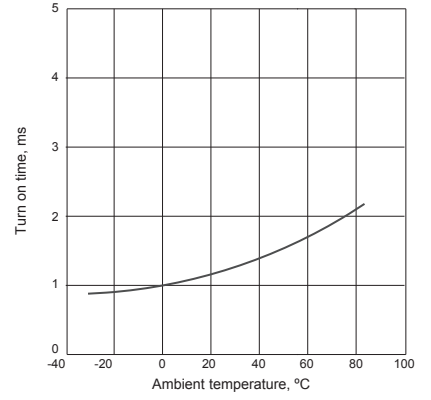
Load current Vs. Ambient temperature



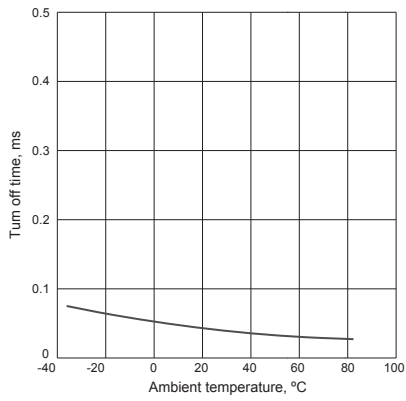
On resistance Vs. Ambient temperature



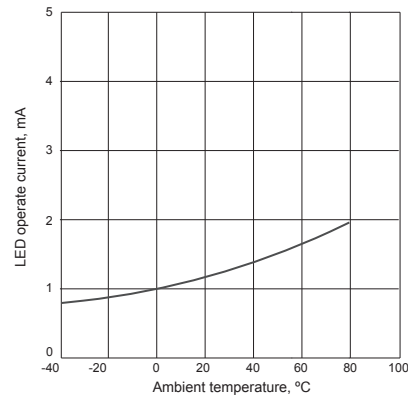
Turn on time Vs. Ambient temperature



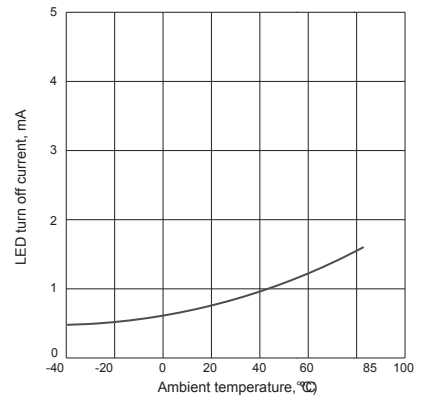
Turn off time Vs. Ambient temperature



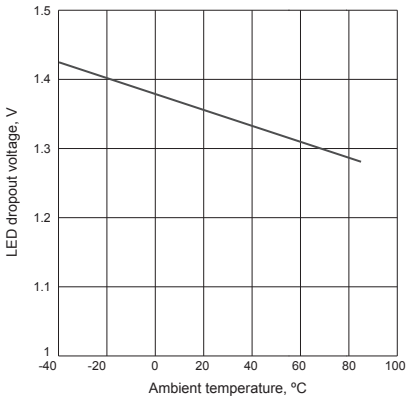
LED operate current Vs. Ambient temperature



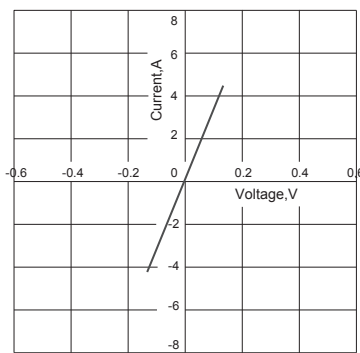
LED Turn off current Vs. Ambient temperature



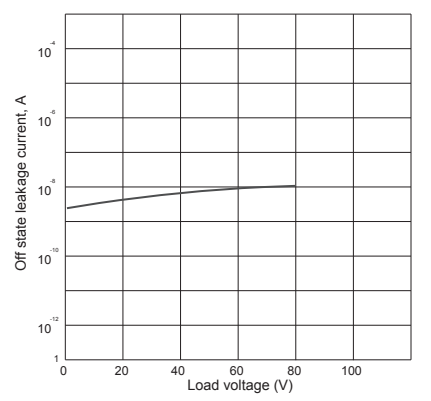
LED forward voltage Vs. Ambient temperature



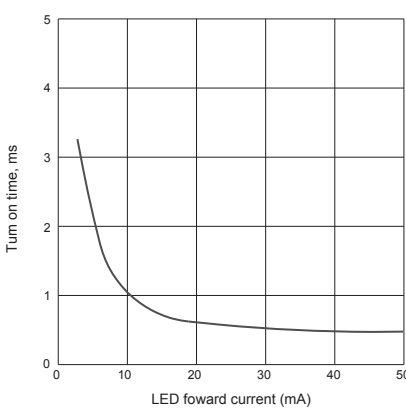
Voltage Vs. current characteristics of output at MOS portion



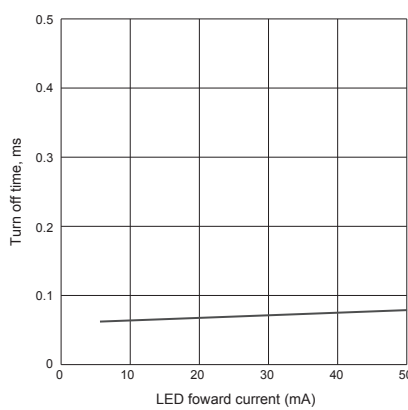
Off state leakage current Vs. Load voltage characteristics



LED forward current Vs. turn on time characteristics



LED forward current Vs. turn off time characteristics



Applied voltage Vs. output capacitance characteristics

