

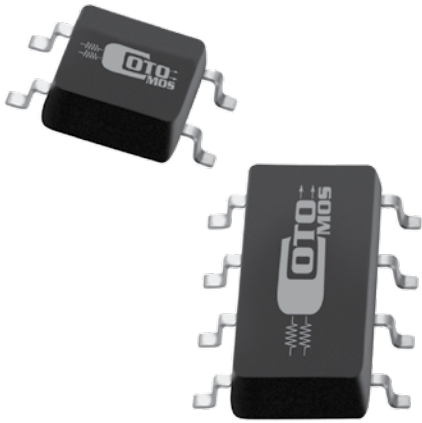


# THE DATASHEET OF C245S



## CotoMOS® C245S/C345S

The C245S and C345S feature current switching capability to 100mA with a low on resistance of 14Ω Maximum. Designed for Security, Measurement and Instrumentation applications the CotoMOS® relay is capable of handling 60V load conditions. If your requirements are different please contact your Coto Applications Engineer for assistance through [www.cotorelay.com](http://www.cotorelay.com).



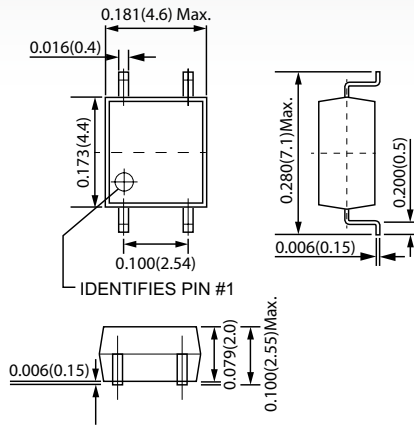
### C245S/C345S Features

- ▶ Contact Form: C245S: 1A / C345S: 2A
- ▶ Load Voltage: 60V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 100mA Maximum
- ▶ On-Resistance: 14Ω Maximum
- ▶ Output Capacitance: 20pF Typical
- ▶ Low Off-State Leakage Current: 1.0μA Maximum

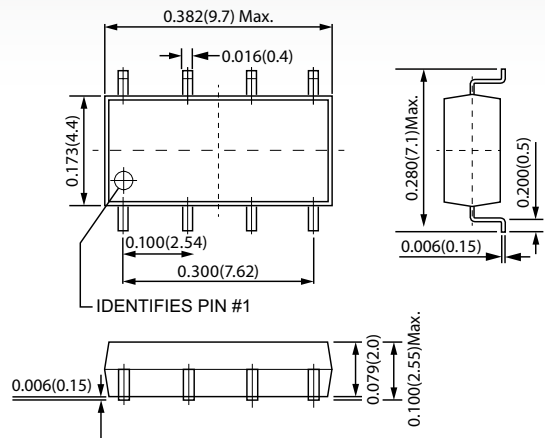
## DIMENSIONS

*in Inches (Millimeters)*

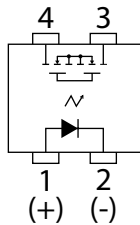
C245S



C345S



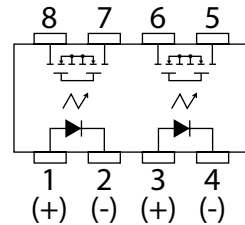
### TERMINAL IDENTIFICATION



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

3,4: Drain (MOSFET)

### TERMINAL IDENTIFICATION



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

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

<b>C245S/C345S MAXIMUM RATINGS (Ambient Temperature: 25°C)</b>			
Parameters	Symbol	Units	Value
<b>INPUT SPECIFICATIONS</b>			
Continuous LED Current	I <sub>F</sub>	mA	50
Peak LED Current	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)	60
Load Current	I <sub>L</sub>	mA	100
Peak Load Current	I <sub>Peak</sub>	A	350
Output Power Dissipation	P <sub>Out</sub>	mW	200 (1Ch) / 400 (2Ch)
<b>RELAY SPECIFICATIONS</b>			
Total Power Dissipation	P <sub>T</sub>	mW	225 (1Ch) / 450 (2Ch)
I/O Breakdown Voltage	V <sub>I/O</sub>	V <sub>rms</sub>	1500
Operating Temperature	T <sub>Opr</sub>	°C	-40 ~ +85
Storage Temperature	T <sub>Stg</sub>	°C	-40 ~ +100

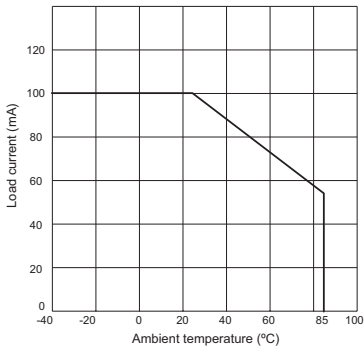
<b>C245S/C345S ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)</b>						
Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
<b>INPUT</b>						
LED Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	V	1.0		1.5
Operation LED Current	I <sub>F On</sub>		mA			3.0
Recovery LED Voltage	V <sub>F Off</sub>		V	0.5		
<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			14
Off-State Leakage Current	I <sub>Leak</sub>	V <sub>L</sub> =60V	μA			1.0
Output Capacitance	C <sub>Out</sub>	V <sub>L</sub> =0V, f=1MHz	pF		20	
<b>TRANSMISSION</b>						
Turn-On Time	T <sub>On</sub>	I <sub>F</sub> =5mA, I <sub>L</sub> =Rating	ms			3.0
Turn-Off Time	T <sub>Off</sub>		ms			1.0
<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:**

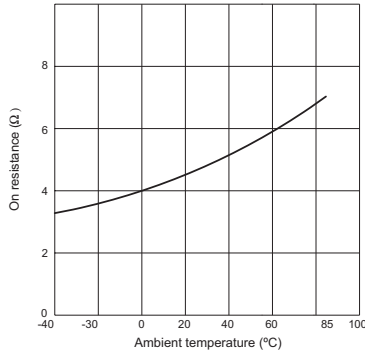
Operating Temp: -40°C to +85°C; Storage Temp: -40 to +100 C.  
All electrical parameters measured at 25° C unless otherwise specified.

# C245S/C345S GRAPHS

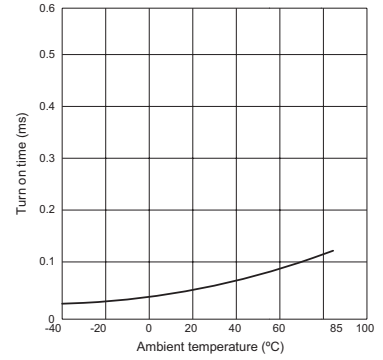
Load current Vs. Ambient temperature



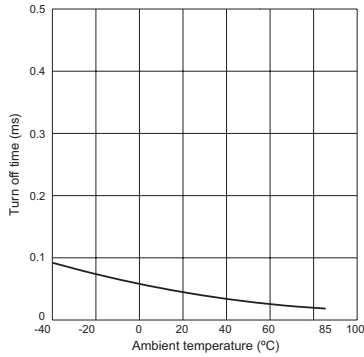
On resistance Vs. Ambient temperature



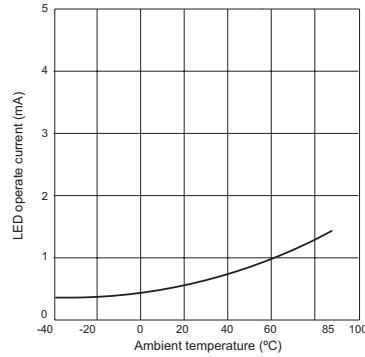
Turn on time Vs. Ambient temperature



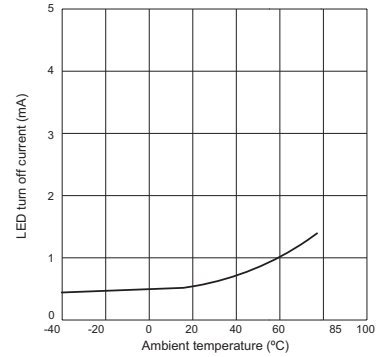
Turn off time Vs. Ambient temperature



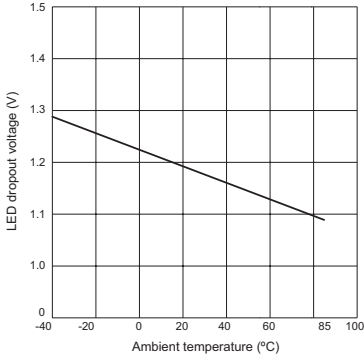
LED operate current Vs. Ambient temperature



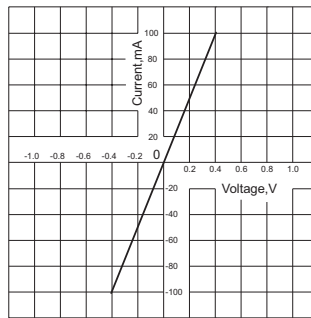
LED Turn off current Vs. Ambient temperature



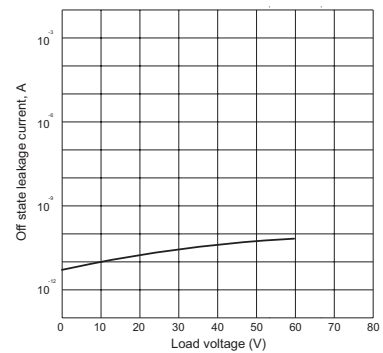
LED forward voltage Vs. Ambient temperature



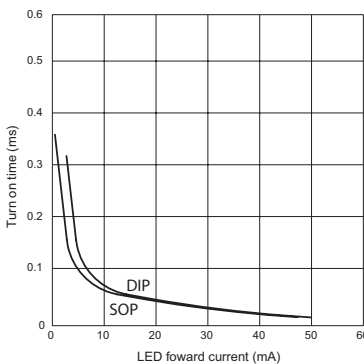
Voltage Vs. current characteristics of output at MOS portion



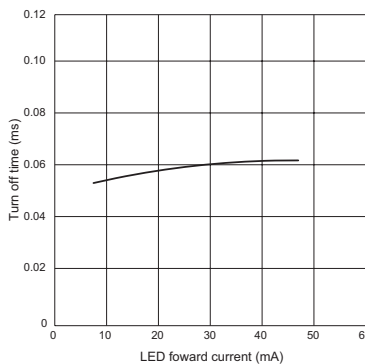
Off state leakage current



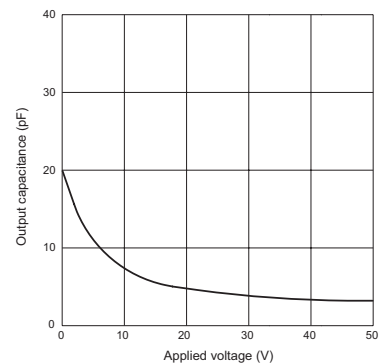
LED forward current Vs. turn on time characteristics



LED forward current Vs. turn off time characteristics





Applied voltage Vs. output capacitance characteristics



## Looking for pricing, stock, or lifecycle information?

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-  [Coto Technology](#) Information

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