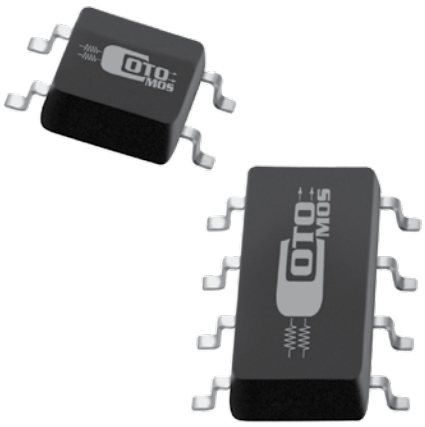


CotoMOS® C245S/C345S

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.

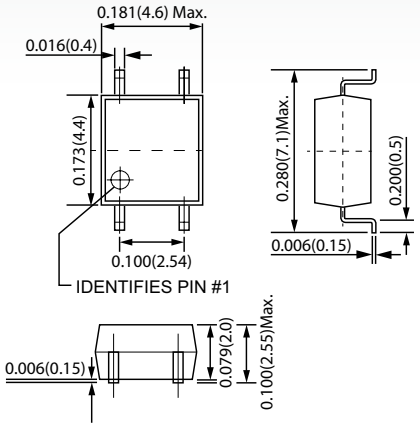
C245S/C345S Features

- 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

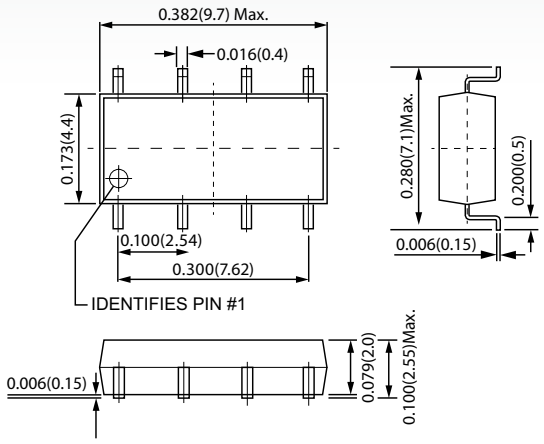
DIMENSIONS

in Inches (Millimeters)

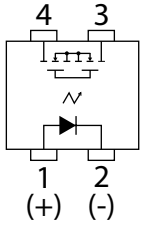
C245S



C345S

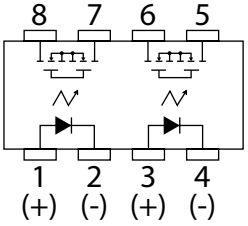


TERMINAL IDENTIFICATION



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)

C245S/C345S 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)	60
Load Current	I_L	mA	100
Peak Load Current	I_{Peak}	A	350
Output Power Dissipation	P_{Out}	mW	200 (1Ch) / 400 (2Ch)
RELAY SPECIFICATIONS			
Total Power Dissipation	P_T	mW	225 (1Ch) / 450 (2Ch)
I/O Breakdown Voltage	$V_{I/O}$	Vrms	1500
Operating Temperature	T_{Opr}	°C	-40 ~ +85
Storage Temperature	T_{Stg}	°C	-40 ~ +100

C245S/C345S ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)

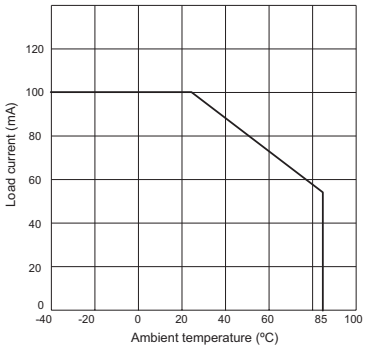
Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
INPUT						
LED Forward Voltage	V_F	I_F=10mA	V	1.0		1.5
Operation LED Current	$I_{F\ On}$		mA			3.0
Recovery LED Voltage	$V_{F\ Off}$		V	0.5		
OUTPUT						
On-Resistance Drain to Drain	R_{On}	I_F=5mA, I_L=Rating Time to flow is within 1 sec.	Ω			14
Off-State Leakage Current	I_{Leak}	V_L=60V	μA			1.0
Output Capacitance	C_{Out}	V_L=0V, f=1MHz	pF		20	
TRANSMISSION						
Turn-On Time	T_{On}	I_F=5mA, I_L=Rating	ms			3.0
Turn-Off Time	T_{Off}		ms			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:

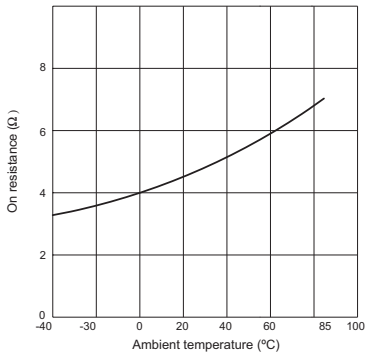
Operating Temp: -40°C to +85° C; Storage Temp: –40 to +100 C.
All electrical parameters measured at 25° C unless otherwise specified.

C245S/C345S GRAPHS

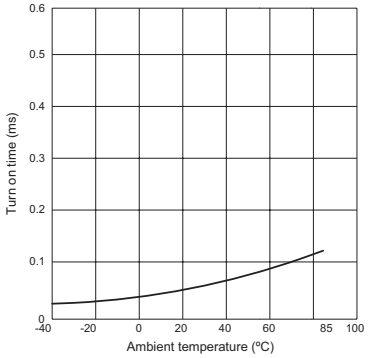
Load current Vs.
Ambient temperature



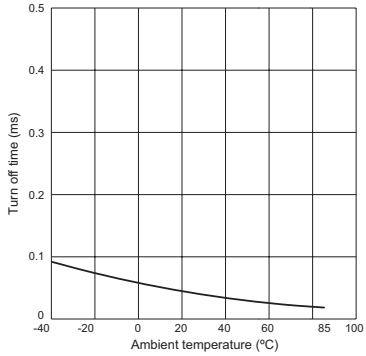
On resistance Vs.
Ambient temperature



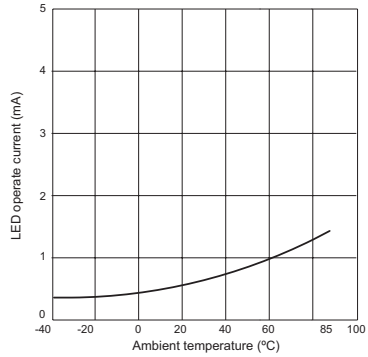
Turn on time Vs.
Ambient temperature



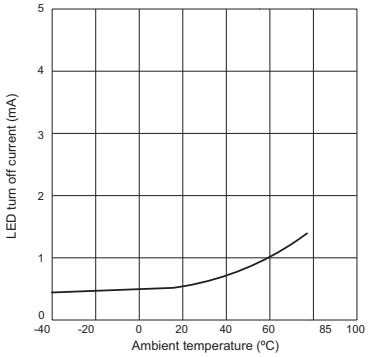
Turn off time Vs.
Ambient temperature



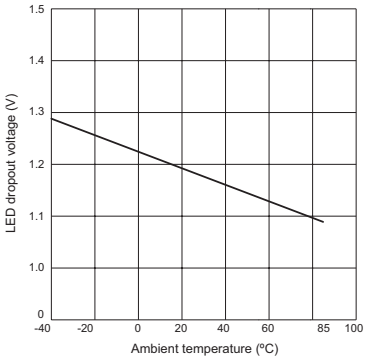
LED operate current Vs.
Ambient temperature



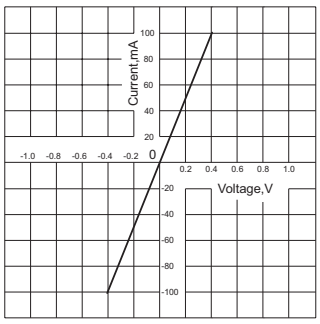
LED Turn off current Vs.
Ambient temperature



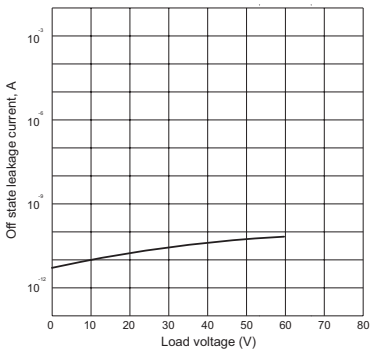
LED forward voltage Vs.
Ambient temperature



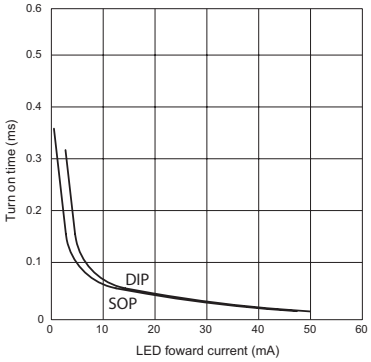
Voltage Vs. current characteristics
of output at MOS portion



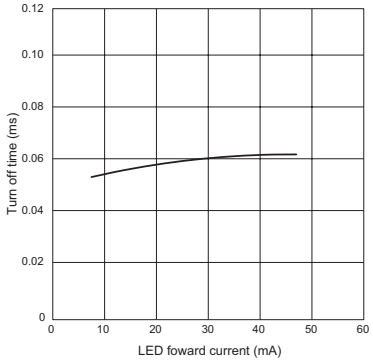
Off state leakage current



LED foward current Vs.
turn on time characteristics



LED foward current Vs.
turn off time characteristics



Applied voltage Vs.
output capacitance characteristics

