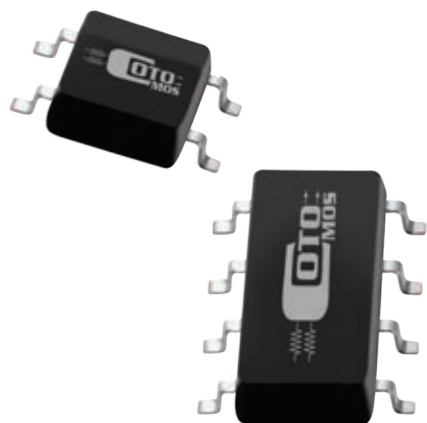




CotoMOS C237S/C337S

When small size and high performance are needed, the SOP package, such as the C237S or C337S, is the industry choice. Both the C237S and the C337S feature low on resistance fast turn on time. In addition, the C337S offers two fully-independent form A channels for further space savings. Both relays are ideally suited to the needs of Test and Measurement, Industrial, and Telecommunications.

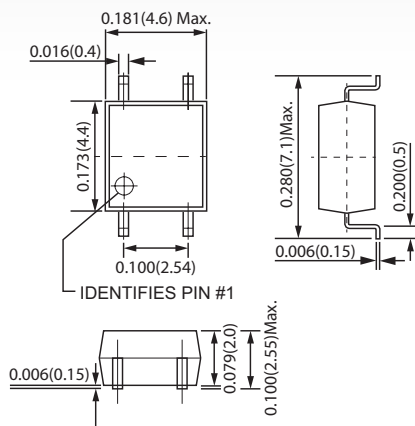
C237S/C337S Features

- ▶ Contact Form: C237S: 1a / C337S: 2a
- ▶ Load Voltage: 60V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: C237S: 350mA Maximum / C337S: 320mA Maximum
- ▶ On-Resistance: 1.6Ω Maximum
- ▶ Output Capacitance: 195pF Typical
- ▶ Low Off-State Leakage Current: 1.0μA Maximum

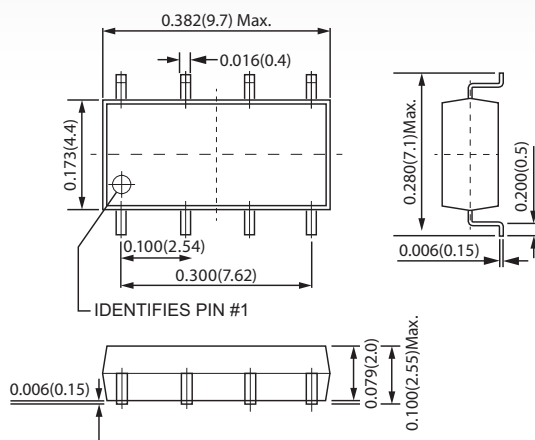
DIMENSIONS

in Inches (Millimeters)

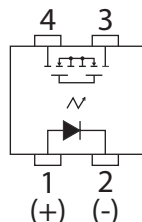
C237S



C337S

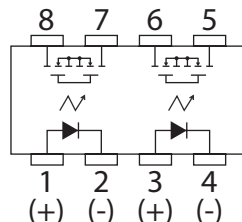


TERMINAL IDENTIFICATION



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)

C237S/C337S 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	500mA
LED Reverse Voltage	V _R	V	5V
Input Power Dissipation	P _{in}	mW	75mW
OUTPUT SPECIFICATIONS			
Load Voltage	V _L	V	60V (AC peak or DC)
Load Current	I _L	A	350mA (1Ch) / 320mA (2Ch)
Peak Load Current	I _{Peak}	A	2.0A
Output Power Dissipation	P _{Out}	mW	200mW (1Ch) / 400mW (2Ch)
RELAY SPECIFICATIONS			
Total Power Dissipation	P _T	mW	225mW (1Ch) / 450mW (2Ch)
I/O Breakdown Voltage	V _{I/O}	V	1500Vrms
Operating Temperature	T _{opr}		-40°C ~ +85°C
Storage Temperature	T _{stg}		-40°C ~ +100°C

C237S/C337S 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		0.9	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		0.8	1.6
Off-State Leakage Current	I _{Leak}	V _L =60V	μA			1.0
Output Capacitance	C _{Out}	V _L =0V, f=1MHz	pF		195	
TRANSMISSION						
Turn-On Time	T _{On}	I _F =5mA, I _L =Rating	ms		0.35	1.5
Turn-Off Time	T _{Off}		ms		0.05	0.2
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.