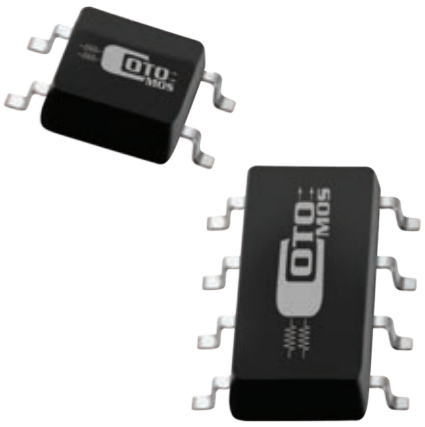


CotoMOS C238S/C338S

When small size and high performance are needed, the SOP package, such as the C238S or C338S, is the industry choice. Both the C238S and the C338S feature low on resistance fast turn on time. In addition, the C338S 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.

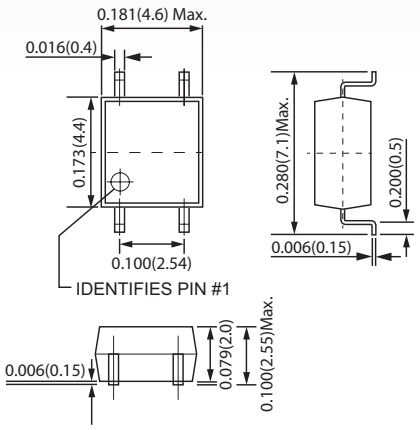
C238S/C338S Features

- Contact Form: C238S: 1a / C338S: 2a
- Load Voltage: 600V Maximum
- Operation LED Current: 3.0mA Maximum
- Load Current: C238S: 70mA Maximum / C338S: 60mA Maximum
- On-Resistance: 60Ω Maximum
- Output Capacitance: 95pF Typical
- Low Off-State Leakage Current: 1.0μA Maximum

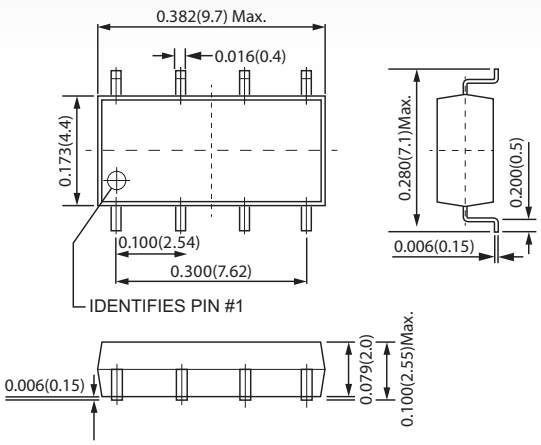
DIMENSIONS

in Inches (Millimeters)

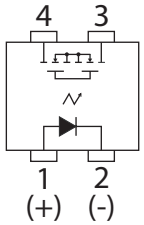
C238S



C338S

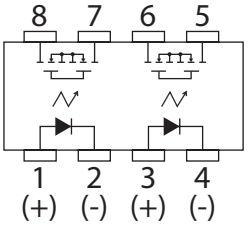


TERMINAL IDENTIFICATION



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)

tel: (401) 943.2686 | fax: (401) 942.0920

C238S/C338S 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	600V (AC peak or DC)
Load Current	I_L	A	70mA (1Ch) / 60mA (2Ch)
Peak Load Current	I_{Peak}	A	200mA
Output Power Dissipation	P_{Out}	mW	300mW (1Ch) / 450mW (2Ch)
RELAY SPECIFICATIONS			
Total Power Dissipation	P_T	mW	350mW (1Ch) / 500mW (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

C238S/C338S 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	1.17	1.5
Operation LED Current	$I_{F\ On}$		mA		0.9	3.0
Recovery LED Voltage	$V_{F\ Off}$		V	0.5	1.0	
OUTPUT						
On-Resistance Drain to Drain	R_{On}	I_F=5mA, I_L=Rating Time to flow is within 1 sec.	Ω		35	60
Off-State Leakage Current	I_{Leak}	V_L=600V	μA			1.0
Output Capacitance	C_{Out}	V_L=0V, f=1MHz	pF		95	
TRANSMISSION						
Turn-On Time	T_{On}	I_F=5mA, I_L=Rating (for SOP type)	ms		0.2	0.5
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.