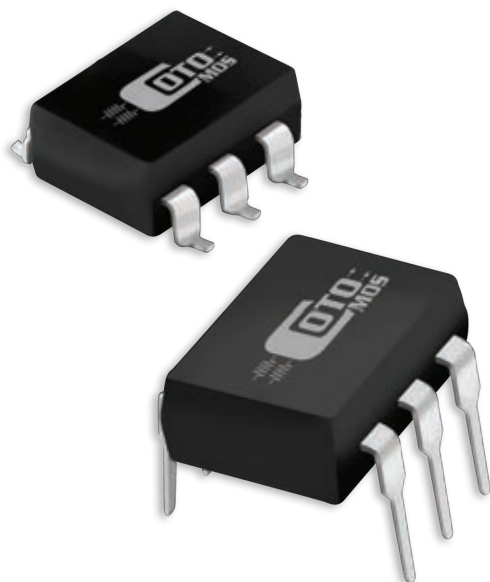


CotoMOS CT147/CS147

The CT147 and CS147 combine Coto quality and economy in an industry standard 6 pin DIP package. Both the CT147 and the CS147 offer low on resistance and high load current. The CT147 utilizes a thru hole lead configuration, while the CS147 offers a surface mount option when the application requires it. Both relays are ideally suited to the needs of Test and Measurement, Industrial, and Telecommunications

CT147/CS147 Features

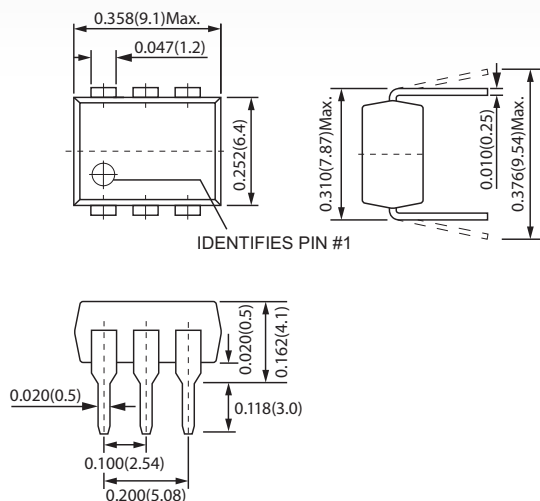
- ▶ Contact Form: 1a
- ▶ Load Voltage: 80V Maximum
- ▶ Operation LED Current: 3.0mA Maximum
- ▶ Load Current: 2.0A Maximum
- ▶ On-Resistance: 0.16Ω Maximum
- ▶ Low Off-State Leakage Current: 1.0μA Maximum
- ▶ I/O Breakdown Voltage: 1500Vrms Minimum
- ▶ Suffix - H for I/O Breakdown Voltage: 5000Vrms Minimum



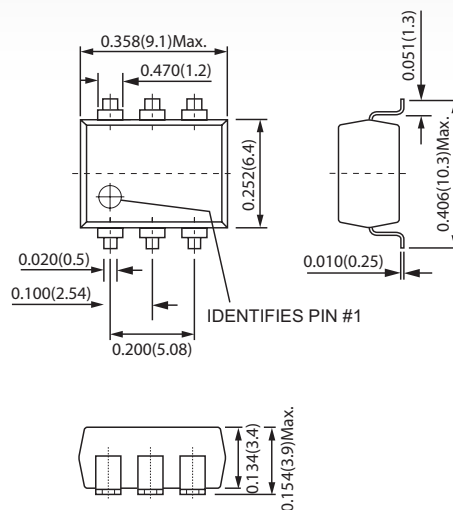
DIMENSIONS

in Inches (Millimeters)

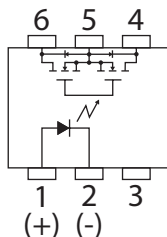
CT147



CS147



TERMINAL IDENTIFICATION



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

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

CT147/CS147 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	80V (AC peak or DC)
Load Current	I _L	A	2.0A
Peak Load Current	I _{Peak}	A	5.0A
Output Power Dissipation	P _{Out}	mW	500mW
RELAY SPECIFICATIONS			
Total Power Dissipation	P _T	mW	550mW
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

CT147/CS147 ELECTRICAL SPECIFICATIONS (Ambient Temperature: 25°C)

Parameters	Symbol	Test Conditions	Units	Min	Typ	Max
INPUT						
LED Forward Voltage	V _F	I=10mA	V	1.0		1.5
Operation LED Current	I _{F On}		mA		1.2	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		0.1	0.16
Off-State Leakage Current	I _{Leak}	V _L =80V	μA			1.0
Output Capacitance	C _{Out}	V _L =0V, f=1MHz	pF		500	
TRANSMISSION						
Turn-On Time	T _{On}	I _F =10mA, I _L =Rating	ms		0.7	5.0
Turn-Off Time	T _{Off}		ms		0.04	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.