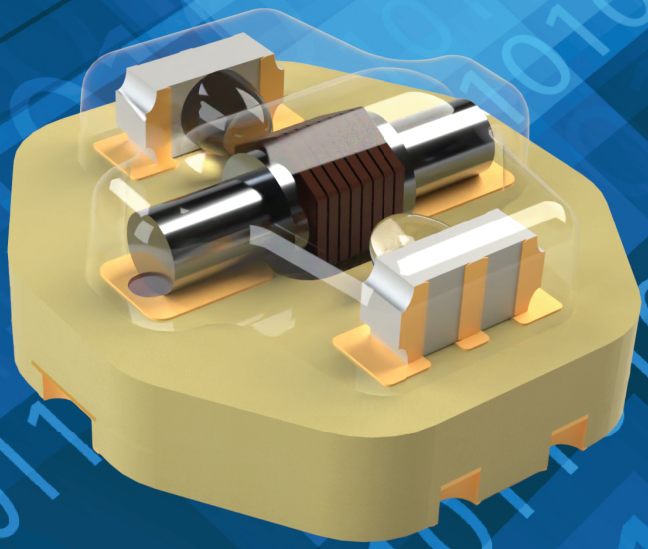
VOLTAGE MULTIPLIERS INC.

High Voltage Optocouplers

Introducing the OCSM50 Surface Mount Optocoupler

5kV Vrwm
High Gain
High Isolation
Small Footprint
OCSM50





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OCSM50

Optocoupler • Surface Mount • Epoxy Molded

ABSOLUTE MAXIMUM RATINGS

	OCSM50
LED	
Forward DC Current	100mA
Surge Current	(tp = 100 µs) 1 A
Reverse Voltage	5 V
Power Dissipation	(25°C) 180 mW
Photodiode	
Reverse Voltage	5,000 V
Power Dissipation	1.0 W

- Storage Temperature -40°C to +100°C
- Operating Temperature -40°C to +70°C
- Isolation Test Voltage 5 kV (From Pins 1, 2, 3, & 4 to Pins 5 & 6)

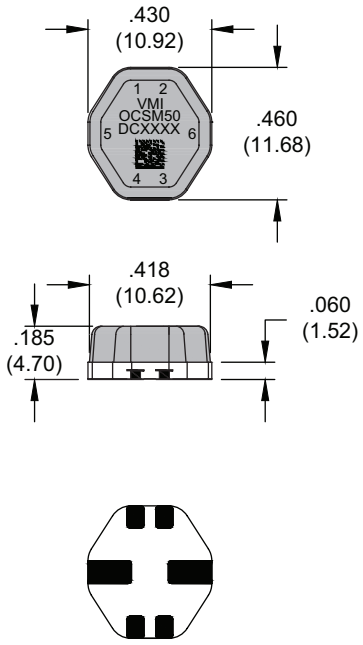
ELECTRICAL CHARACTERISTICS

	OCSM50
LED	
Forward Voltage	(If = 100 mA) 1.8 V
Reverse Leakage Current VR = 5V	Not Designed for Reverse Operation
Photodiode	
Forward Voltage	(If = 0.6 A) 8.0 V MAX
Reverse Leakage Current	
VR = 10kV, I_{LED} = 0 mA	250 nA Typical
VR = 20kV, I_{LED} = 50 mA	400 µA* Typical
Coupled	
DC Current Transfer Ratio	
I_{LED} = 50 mA, VR = 20kV	0.75% MIN*
t_{ON} = (Typical)	2 µs
t_{OFF} = (Typical)	2 µs

(25°C UNLESS OTHERWISE NOTED)

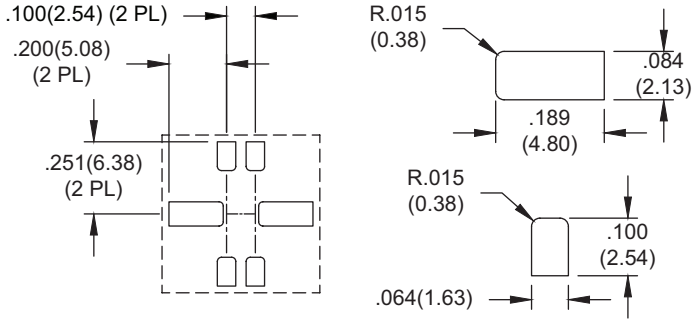
*Prototype numbers subject to change.

OCSM50

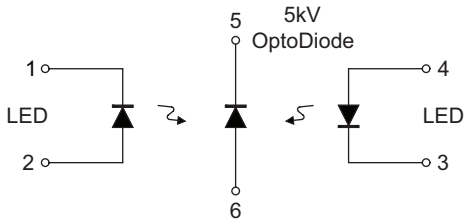


Tolerance:
.XX ±.015

Pad Layout



Simplified Circuit Schematic



Dimensions: In. (mm) • All temperatures are ambient unless otherwise noted. • Data subject to change without notice.

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