

MOCD217



ISOCOM

COMPONENTS

HIGH DENSITY MOUNTING DUAL CHANNEL OPTICALLY COUPLED ISOLATOR



DESCRIPTION

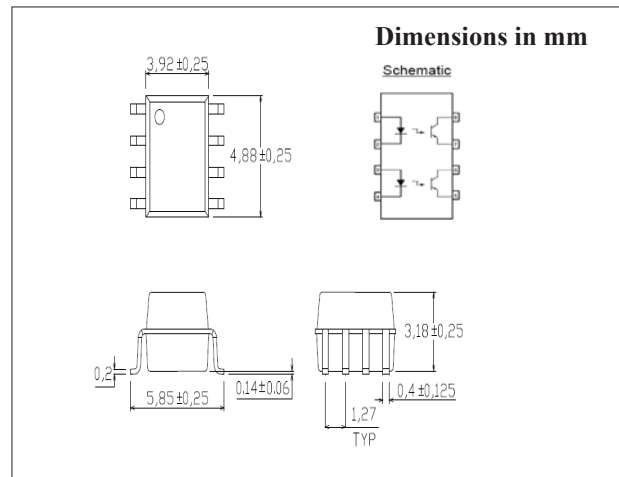
The MOCD217 optically coupled isolator consists of two infrared light emitting diodes and two NPN silicon photo transistors in a space efficient dual in line plastic package.

FEATURES

- Super Small Outline
- Low Input Current CTR 100%
- High Isolation Voltage (3750V_{RMS})
- All electrical parameters 100% tested
- Custom electrical selections available

APPLICATIONS

- Feedback Control Circuits
- Interfacing and coupling systems of different potentials and impedances
- General Purpose Switching Circuits
- Monitor and Detection Circuits



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ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature _____ -55°C to +150°C
Operating Temperature _____ -55°C to +110°C

INPUT DIODE

Forward Current _____ 60mA
Reverse Voltage _____ 6V
Power Dissipation _____ 90mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV_{CEO} _____ 80V
Emitter-collector Voltage BV_{ECO} _____ 7V
Collector Current _____ 50mA
Power Dissipation _____ 150mW

POWER DISSIPATION

Total Power Dissipation _____ 250mW

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.5	V	$I_F = 10\text{mA}$
	Reverse Current (I_R)			100	μA	$V_R = 6\text{V}$
Output	Collector-emitter Breakdown (BV_{CEO})	80			V	$I_C = 0.1\text{mA}$
	Emitter-collector Breakdown (BV_{ECO})	7			V	$I_E = 100\mu\text{A}$
	Collector-emitter Dark Current (I_{CEO})			50	nA	$V_{CE} = 10\text{V}$
Coupled	Current Transfer Ratio (CTR)	100	130		%	$1\text{mA} I_F, 5\text{V} V_{CE}$
	Collector-Emitter Saturation Voltage			0.4	V	$10\text{mA} I_F, 2.4\text{mA} I_C$
	Input to Output Isolation Voltage V_{ISO}	3750			V_{RMS}	See note 1
	Input-output Isolation Resistance R_{ISO}	10^{11}			Ω	$V_{IO} = 500\text{VDC}$ (note 1)
	Output Rise Time (tr) Output Fall Time (tf)		1.6 2.2		μs μs	$V_{CC} = 5\text{V},$ $I_C = 2\text{mA}, R_L = 100\Omega$

Note 1 Measured with input leads shorted together and output leads shorted together.