

**52464 Micro (Pick and Place) Photovoltaic
Hi Voltage Output Optocoupler**



<p>Features:</p> <ul style="list-style-type: none"> • 12V min. / 14V typical output at 25°C • Input/Output Isolation Tested to 1000 VDC • Mil Temp Range • Pick and Place mounting • Solderable terminations 	<p>Applications:</p> <ul style="list-style-type: none"> • FET and IGBT drivers
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DESCRIPTION

The 52464 Photovoltaic Optocoupler is designed for Pick and Place applications using solder or conductive epoxy attachment.

It is a single channel optocoupler consisting of optically coupled LED light to photovoltaic detector. Each micro-coupler is 100% DC tested at 25°C. (+125°C testing or 100% element evaluation available upon request). All couplers are designed to operate over the full military temperature range.

The 52464 is optimized for gate drive of FETs and IGBTs requiring full modulation.

ABSOLUTE MAXIMUM RATINGS

Continuous Input Current	30mA
Storage Temperature Range	-65°C to +125°C
Operating Temperature	-55°C to +125°C
Solder Temperature for 10 seconds	300°C
Reverse Input Voltage	6 VDC

RECOMMENDED OPERATING CONDITIONS:

Parameter	Symbol	Min.	Max.	Units
Input Current	$I_{F(ON)}$	1	20	mA
Operating Case Temperature	T_C	-55	+125	°C

52464

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Micropac Industries cannot assume any responsibility for any circuits shown or represent that they are free from patent infringement. Micropac reserves the right to make changes at any time in order to improve design and to supply the best product possible.

ELECTRICAL SPECIFICATIONS

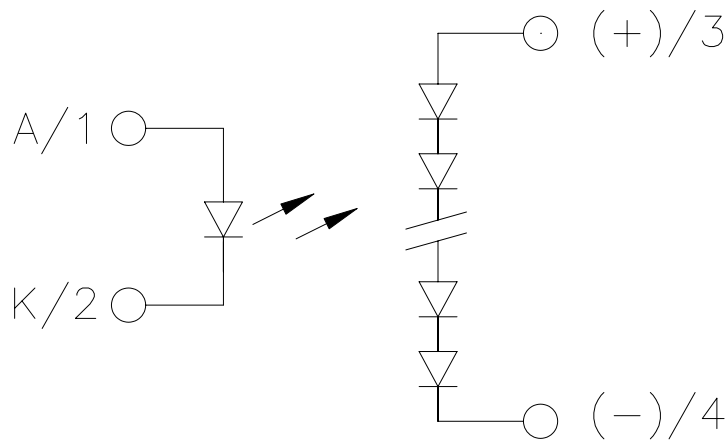
$T_C = 25^\circ\text{C}$ to $+125^\circ\text{C}$ unless otherwise specified

Parameter	Sym.	Min.	Typ.*	Max.	Units	Test Conditions	Notes
Input Forward Voltage	V_F	2.2		3.0	VDC	$I_F = 10\text{ mA}$	
Input Reverse Breakdown Voltage	V_R	6	40	—	VDC	$I_R = 100\ \mu\text{A}$	
Input-to-Output Capacitance	C_{IO}		4	7	pF	Inputs and Outputs shorted	
Output open circuit Voltage	V_{open}	12	14		V	$I_F = 10\text{mA}$	
Output Voltage Temperature change	V_{temp}		-2.2		mV/ $^\circ\text{C}$	$I_F = 10$	
Output short circuit Current	I_{short}	10	15		μA	$I_F = 10\text{mA}$	
Input-Output Leakage	I_{I-O}	—	—	1	μA	$RH \leq 45\%$, $t = 5\text{ s}$ $V_{I-O} = 1000\text{ VDC}$ $T_C = 25^\circ\text{C}$	1

Notes:

1. This parameter is measured between both Output terminals shorted together and both Input terminals shorted together.
2. Dot on top of package indicates LED Anode, Pin 1.
3. LED Anode pad Pin 1 is $.022 \pm .003"$ X $.025 \pm .003"$. Remaining pads are $.025 \pm .003"$ X $.025 \pm .003"$.

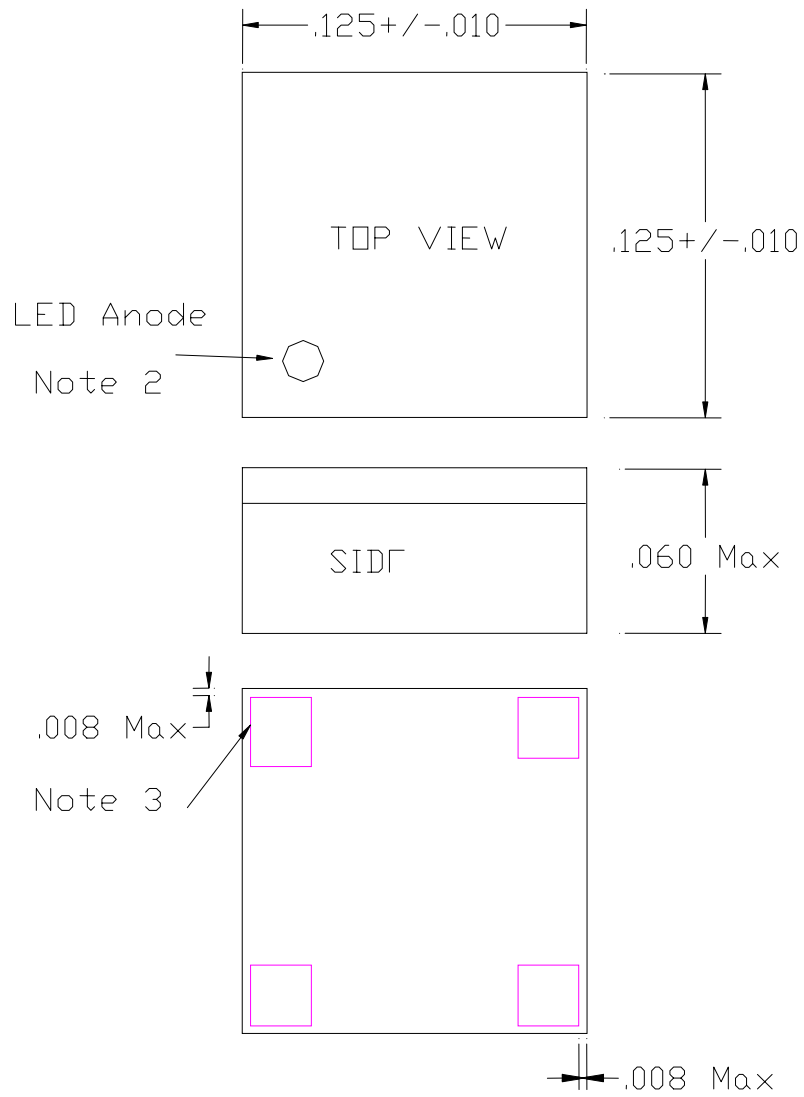
Schematic Diagram



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