


## Small Outline Optoisolators Transistor Output

These devices consist of a gallium arsenide infrared emitting diode optically coupled to a monolithic silicon phototransistor detector, in a surface mountable, small outline, plastic package. They are ideally suited for high density applications, and eliminate the need for through-the-board mounting.

- Convenient Plastic SOIC-8 Surface Mountable Package Style
- Closely Matched Current Transfer Ratios
- Minimum  $V_{(BR)CEO}$  of 70 Volts Guaranteed
- Standard SOIC-8 Footprint, with 0.050" Lead Spacing
- Compatible with Dual Wave, Vapor Phase and IR Reflow Soldering
- High Input-Output Isolation of 3000 Vac (rms) Guaranteed
- UL Recognized  File #E90700, Volume 2

### Ordering Information:

- To obtain MOC205, 206, 207, 208 in Tape and Reel, add R2 suffix to device numbers:  
R2 = 2500 units on 13" reel
- To obtain MOC205, 206, 207, 208 in quantities of 50 (shipped in sleeves) — No Suffix

### Marking Information:

- MOC205 = 205
- MOC206 = 206
- MOC207 = 207
- MOC208 = 208

### Applications:

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

### MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

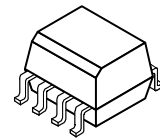
Rating	Symbol	Value	Unit
<b>INPUT LED</b>			
Forward Current — Continuous	$I_F$	60	mA
Forward Current — Peak (PW = 100 $\mu\text{s}$ , 120 pps)	$I_F(\text{pk})$	1.0	A
Reverse Voltage	$V_R$	6.0	V
LED Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	90 0.8	mW mW/ $^\circ\text{C}$

### OUTPUT TRANSISTOR

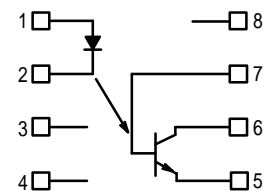
Collector-Emitter Voltage	$V_{CEO}$	70	V
Collector-Base Voltage	$V_{CBO}$	70	V
Emitter-Collector Voltage	$V_{ECO}$	7.0	V
Collector Current — Continuous	$I_C$	150	mA
Detector Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	150 1.76	mW mW/ $^\circ\text{C}$

**MOC205**  
**MOC206**  
**MOC207**  
**MOC208**

**SMALL OUTLINE  
OPTOISOLATORS  
TRANSISTOR OUTPUT**



### SCHEMATIC



1. LED ANODE
2. LED CATHODE
3. NO CONNECTION
4. NO CONNECTION
5. EMITTER
6. COLLECTOR
7. BASE
8. NO CONNECTION

**MAXIMUM RATINGS — continued** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Rating	Symbol	Value	Unit
<b>TOTAL DEVICE</b>			
Input–Output Isolation Voltage <sup>(1,2)</sup> (60 Hz, 1.0 sec. duration)	$V_{ISO}$	3000	Vac(rms)
Total Device Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	250 2.94	mW mW/°C
Ambient Operating Temperature Range <sup>(3)</sup>	$T_A$	–45 to +100	°C
Storage Temperature Range <sup>(3)</sup>	$T_{stg}$	–45 to +125	°C
Lead Soldering Temperature (1/16" from case, 10 sec. duration)	—	260	°C

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)<sup>(4)</sup>

Characteristic	Symbol	Min	Typ <sup>(4)</sup>	Max	Unit
----------------	--------	-----	--------------------	-----	------

**INPUT LED**

Forward Voltage ( $I_F = 10\text{ mA}$ )	$V_F$	—	1.15	1.5	V
Reverse Leakage Current ( $V_R = 6.0\text{ V}$ )	$I_R$	—	0.1	100	$\mu\text{A}$
Capacitance	$C$	—	18	—	pF

**OUTPUT TRANSISTOR**

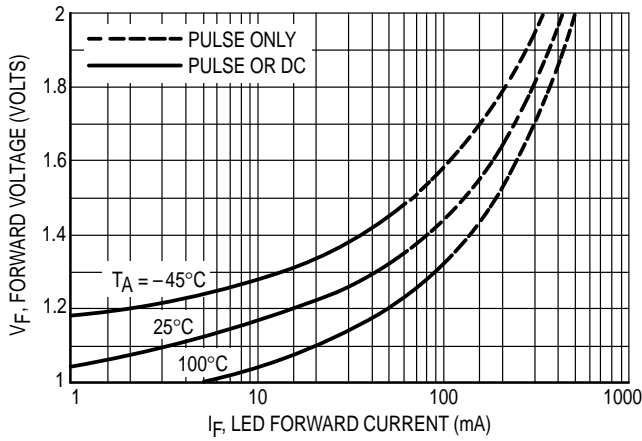
Collector–Emitter Dark Current ( $V_{CE} = 10\text{ V}$ , $T_A = 25^\circ\text{C}$ ) ( $V_{CE} = 10\text{ V}$ , $T_A = 100^\circ\text{C}$ )	$I_{CEO1}$	—	1.0	50	nA
	$I_{CEO2}$	—	1.0	—	$\mu\text{A}$
Collector–Emitter Breakdown Voltage ( $I_C = 100\ \mu\text{A}$ )	$V_{(BR)CEO}$	70	120	—	V
Emitter–Collector Breakdown Voltage ( $I_E = 100\ \mu\text{A}$ )	$V_{(BR)ECO}$	7.0	7.8	—	V
Collector–Emitter Capacitance ( $f = 1.0\text{ MHz}$ , $V_{CE} = 0$ )	$C_{CE}$	—	7.0	—	pF

**COUPLED**

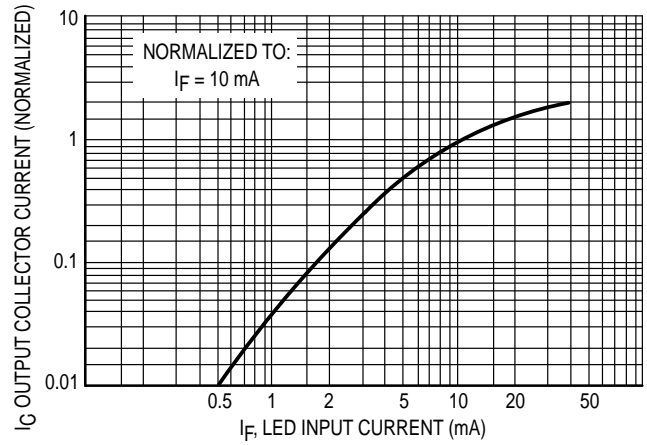
Output Collector Current ( $I_F = 10\text{ mA}$ , $V_{CE} = 10\text{ V}$ )	MOC205 MOC206 MOC207 MOC208	$I_C$ (CTR) <sup>(5)</sup>	4.0 (40) 6.3 (63) 10 (100) 4.0 (40)	6.0 (60) 9.4 (94) 15 (150) 8.0 (80)	8.0 (80) 12.5 (125) 20 (200) 12.5 (125)	mA (%)
Collector–Emitter Saturation Voltage ( $I_C = 2.0\text{ mA}$ , $I_F = 10\text{ mA}$ )		$V_{CE(sat)}$	—	0.15	0.4	V
Turn–On Time ( $I_C = 2.0\text{ mA}$ , $V_{CC} = 10\text{ V}$ , $R_L = 100\ \Omega$ )		$t_{on}$	—	3.0	—	$\mu\text{s}$
Turn–Off Time ( $I_C = 2.0\text{ mA}$ , $V_{CC} = 10\text{ V}$ , $R_L = 100\ \Omega$ )		$t_{off}$	—	2.8	—	$\mu\text{s}$
Rise Time ( $I_C = 2.0\text{ mA}$ , $V_{CC} = 10\text{ V}$ , $R_L = 100\ \Omega$ )		$t_r$	—	1.6	—	$\mu\text{s}$
Fall Time ( $I_C = 2.0\text{ mA}$ , $V_{CC} = 10\text{ V}$ , $R_L = 100\ \Omega$ )		$t_f$	—	2.2	—	$\mu\text{s}$
Input–Output Isolation Voltage ( $f = 60\text{ Hz}$ , $t = 1.0\text{ sec.}$ ) <sup>(1,2)</sup>		$V_{ISO}$	3000	—	—	Vac(rms)
Isolation Resistance ( $V_{I-O} = 500\text{ V}$ ) <sup>(2)</sup>		$R_{ISO}$	$10^{11}$	—	—	$\Omega$
Isolation Capacitance ( $V_{I-O} = 0$ , $f = 1.0\text{ MHz}$ ) <sup>(2)</sup>		$C_{ISO}$	—	0.2	—	pF

1. Input–Output Isolation Voltage,  $V_{ISO}$ , is an internal device dielectric breakdown rating.
2. For this test, pins 1 and 2 are common, and pins 5, 6 and 7 are common.
3. Refer to Quality and Reliability Section in Opto Data Book for information on test conditions.
4. Always design to the specified minimum/maximum electrical limits (where applicable).
5. Current Transfer Ratio (CTR) =  $I_C/I_F \times 100\%$ .

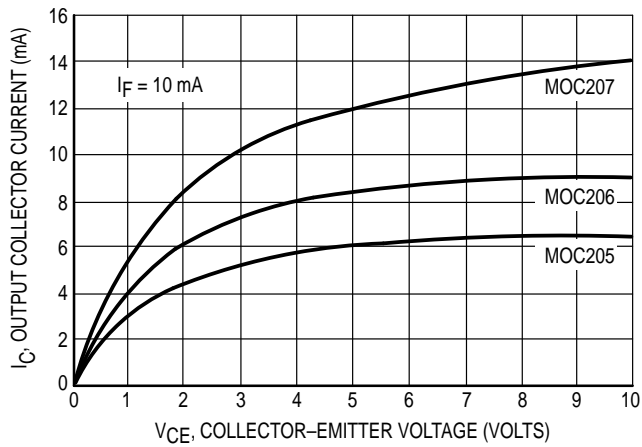
**TYPICAL CHARACTERISTICS**



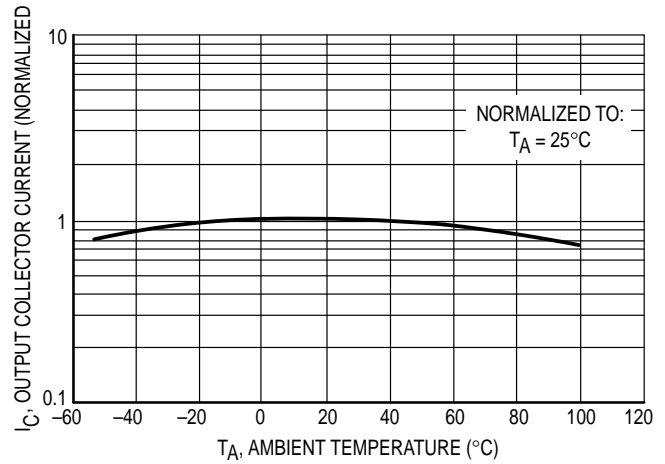
**Figure 1. LED Forward Voltage versus Forward Current**



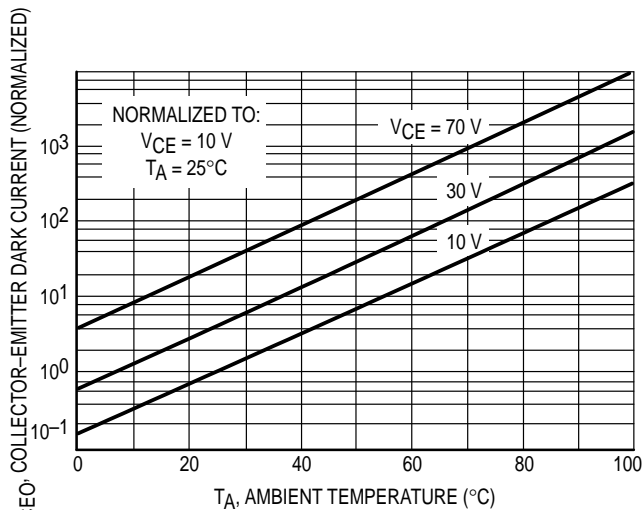
**Figure 2. Output Current versus Input Current**



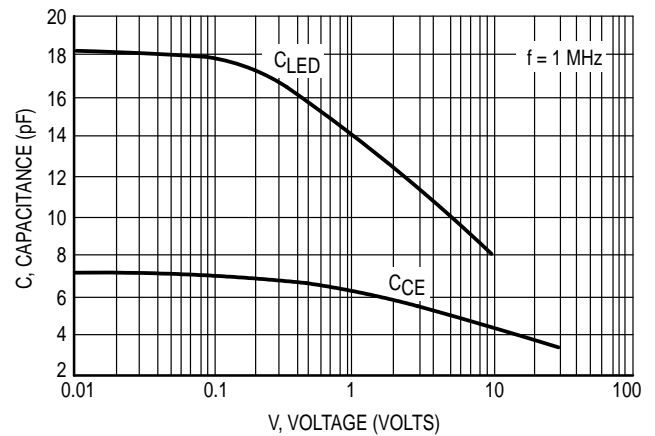
**Figure 3. Output Current versus Collector-Emitter Voltage**



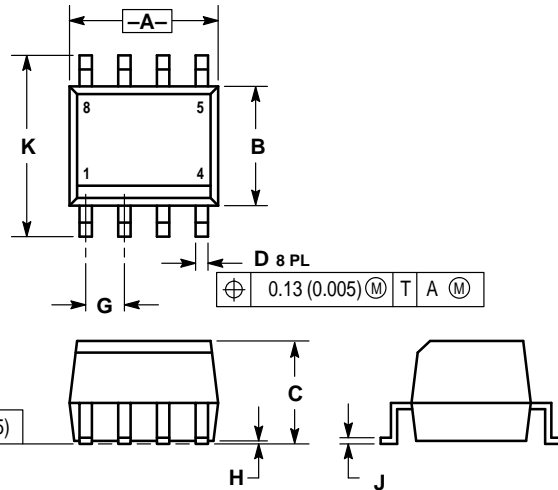
**Figure 4. Output Current versus Ambient Temperature**



**Figure 5. Dark Current versus Ambient Temperature**



**Figure 6. Capacitance versus Voltage**



- NOTES:  
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.182	0.202	4.63	5.13
B	0.144	0.164	3.66	4.16
C	0.123	0.143	3.13	3.63
D	0.011	0.021	0.28	0.53
G	0.050 BSC		1.27 BSC	
H	0.003	0.008	0.08	0.20
J	0.006	0.010	0.16	0.25
K	0.224	0.244	5.69	6.19

- STYLE 1:  
PIN 1. ANODE  
2. CATHODE  
3. NC  
4. NC  
5. EMITTER  
6. COLLECTOR  
7. BASE  
8. NC

**DISCLAIMER**

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

**LIFE SUPPORT POLICY**

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

[Products groups](#)[Analog and Mixed](#)[Signal](#)[Discrete](#)[Interface](#)[Logic](#)[Microcontrollers](#)[Non-Volatile](#)[Memory](#)[Optoelectronics](#)[Markets and](#)[applications](#)[New products](#)[Product selection and](#)[parametric search](#)[Cross-reference](#)[search](#)[technical information](#)[buy products](#)[technical support](#)[my Fairchild](#)[company](#)

## Former Motorola Products Now Supplied by Fairchild

Select a product number to download its datasheet in PDF format ([Adobe Acrobat Reader](#) required). A **-M** suffix indicates a former Motorola product.

## Contents

[4N](#) | [CNY](#) | [H11](#) | [MCT](#) | [MOC](#) |

## Datasheets for products beginning with 4N

<a href="#">4N25-M</a>	4N25A-M obsoleted, no replacement	<a href="#">4N26-M</a>
<a href="#">4N27-M</a>	<a href="#">4N28-M</a>	4N29-M replaced by <a href="#">4N29</a>
4N29A-M replaced by <a href="#">4N29</a>	4N30-M replaced by <a href="#">4N30</a>	4N31-M replaced by <a href="#">4N31</a>
4N32-M replaced by <a href="#">4N32</a>	4N33-M replaced by <a href="#">4N33</a>	<a href="#">4N35-M</a>
<a href="#">4N36-M</a>	<a href="#">4N37-M</a>	4N38-M replaced by <a href="#">4N38</a>
4N38A-M replaced by <a href="#">4N38</a>		

[back to top](#)

## Datasheets for products beginning with CNY

<a href="#">CNY17-1-M</a>	<a href="#">CNY17-2-M</a>	<a href="#">CNY17-3-M</a>
---------------------------	---------------------------	---------------------------

[back to top](#)

## Datasheets for products beginning with H11

<a href="#">H11A1-M</a>	H11AA1-M replaced by <a href="#">H11AA1</a>	H11AA2-M replaced by <a href="#">H11AA2</a>
-------------------------	--	--

## Related links

[6 pin black/white package  
comparison](#)[Request samples](#)[Buy products](#)[Optocoupler products](#)[Optoelectronics products](#)[Contact us](#)

H11AA3-M replaced by <a href="#">H11AA3</a>	H11AA4-M replaced by <a href="#">H11AA4</a>	<a href="#">H11AV1-M</a>
<a href="#">H11AV1A-M</a>	<a href="#">H11AV2-M</a>	<a href="#">H11AV2A-M</a>
H11B1-M replaced by <a href="#">H11B1</a>	H11B3-M replaced by <a href="#">H11B3</a>	H11D1-M replaced by <a href="#">H11D1</a>
H11D2-M replaced by <a href="#">H11D2</a>	H11G1-M replaced by <a href="#">H11G1</a>	H11G2-M replaced by <a href="#">H11G2</a>
H11G3-M replaced by <a href="#">H11G3</a>	<a href="#">H11L1-M</a>	<a href="#">H11L2-M</a>
<a href="#">H11L3-M</a>		

[back to top](#)

.

Datasheets for products beginning with MCT

<a href="#">MCT2-M</a>	<a href="#">MCT2E-M</a>	
------------------------	-------------------------	--

[back to top](#)

.

Datasheets for products beginning with MOC

<a href="#">MOC205-M</a>	<a href="#">MOC206-M</a>	<a href="#">MOC207-M</a>
<a href="#">MOC208-M</a>	<a href="#">MOC211-M</a>	<a href="#">MOC212-M</a>
<a href="#">MOC213-M</a>	<a href="#">MOC215-M</a>	<a href="#">MOC216-M</a>
<a href="#">MOC217-M</a>	<a href="#">MOC223-M</a>	<a href="#">MOC256-M</a>
<a href="#">MOC3010-M</a>	<a href="#">MOC3011-M</a>	<a href="#">MOC3012-M</a>
<a href="#">MOC3020-M</a>	<a href="#">MOC3021-M</a>	<a href="#">MOC3022-M</a>
<a href="#">MOC3023-M</a>	<a href="#">MOC3031-M</a>	<a href="#">MOC3032-M</a>
<a href="#">MOC3033-M</a>	<a href="#">MOC3041-M</a>	<a href="#">MOC3042-M</a>
<a href="#">MOC3043-M</a>	<a href="#">MOC3051-M</a>	<a href="#">MOC3052-M</a>
<a href="#">MOC3061-M</a>	<a href="#">MOC3062-M</a>	<a href="#">MOC3063-M</a>
<a href="#">MOC3081-M</a>	<a href="#">MOC3081-M</a>	<a href="#">MOC3083-M</a>
<a href="#">MOC3162-M</a>	<a href="#">MOC3163-M</a>	<a href="#">MOC5007-M</a>
<a href="#">MOC5008-M</a>	<a href="#">MOC5009-M</a>	MOC8030-M replaced by <a href="#">MOC8030</a>

MOC8050-M replaced by <a href="#">MOC8050</a>	MOC8080-M replaced by <a href="#">MOC8080</a>	<a href="#">MOC8100-M</a>
MOC8204-M replaced by <a href="#">MOC8204</a>	<a href="#">MOCD207-M</a>	<a href="#">MOCD208-M</a>
<a href="#">MOCD211-M</a>	<a href="#">MOCD213-M</a>	<a href="#">MOCD217-M</a>
<a href="#">MOCD223-M</a>		

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |  
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

---

© [Copyright 2002 Fairchild Semiconductor](#)

Last updated: March 19, 2002

---



Fairchild Semiconductor

SEARCH | [Parametric](#) | [Cross Reference](#)

space

Product Folders and

Applic

find products

[Home](#) >> [Find products](#) >>

[Products groups](#)

[Analog and Mixed](#)

[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and applications](#)

[New products](#)

[Product selection and parametric search](#)

[Cross-reference search](#)

technical information

buy products

technical support

my Fairchild

company

MOC206-M  
SO8 Phototransistor Coupler

Contents

[General description](#) | [Applications](#) | [Ordering information](#) | [Product status/pricing/packaging](#) | [Safety agency certificates](#)

General description

These devices consist of a gallium arsenide infrared emitting diode optically coupled to a monolithic silicon phototransistor detector, in a surface mountable, small outline, plastic package. They are ideally suited for high density applications and eliminates the need for through-the-board mounting.

- Convenient plastic SOIC-8 surface mountable package style
- Closely matched current transfer ratios
- Minimum  $V_{(BR)CEO}$  of 70 volts guaranteed
- Standard SOIC-8 footprint, with a 0.050-inch lead spacing
- Compatible with dual wave, vapor phase and IR reflow soldering
- High input - Output isolation of 3000 VAC (RMS) guaranteed
- Underwriters Laboratory (UL) recognized - File #E90700, Volume 2

[back to top](#)

Applications

Datasheet

[Download this datasheet](#)



[e-mail this datasheet](#)



This page

[Print version](#)

Related Links

[Request samples](#)

[Dotted line](#)

[How to order products](#)

[Dotted line](#)

[Product Change Notices \(PCNs\)](#)

[Dotted line](#)

[Support](#)

[Dotted line](#)

[Distributor and field sales representatives](#)

[Dotted line](#)

[Quality and reliability](#)

[Dotted line](#)

[Design tools](#)

- Feedback control circuits
- Interfacing and coupling systems of different potentials and impedances
- General purpose switching circuits
- Monitor and detection circuits

[back to top](#)

#### Ordering information

The following options can be ordered with this part:

Option	Order Entry Identifier	Description
R1	R1	Surface-Mount Lead Bend Tape and Reel (500-pc reel)
R2	R2	Surface-Mount Lead Bend Tape and Reel (2500-pc reel)

[back to top](#)

#### Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
MOC206-M	Full Production	\$0.264	SOIC	8	RAIL
MOC206R1-M	Full Production	\$0.273	SOIC	8	TAPE REEL
MOC206R2-M	Full Production	\$0.273	SOIC	8	TAPE REEL

\* 1,000 piece Budgetary Pricing

[back to top](#)

#### Safety agency certificates

Certificate	Agency	
<a href="#">8460,8461</a> (171 K)	BSI	British Standards Institution
<a href="#">136616</a> (161 K)	VDE	VDE Pruf-und Zertifizierungsinstitut
<a href="#">E90700, Vol. 2</a> (254 K)	UL	Underwriters Laboratories Inc.

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |  
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

---

[© Copyright 2002 Fairchild Semiconductor](#)

[Last updated: April 7, 2002](#)

---

Fairchild Semiconductor

SEARCH | Parametric | Cross Reference

space

Product Folders and

Applic

find products

Home >> Find products >>

Products groups

Analog and Mixed

Signal

Discrete

Interface

Logic

Microcontrollers

Non-Volatile

Memory

Optoelectronics

Markets and

applications

New products

Product selection and

parametric search

Cross-reference

search

technical information

buy products

technical support

my Fairchild

company

## MOC207-M SO8 Phototransistor Coupler

Contents

[General description](#) | [Applications](#) | [Ordering information](#) | [Product status/pricing/packaging](#) | [Safety agency certificates](#)

### General description

These devices consist of a gallium arsenide infrared emitting diode optically coupled to a monolithic silicon phototransistor detector, in a surface mountable, small outline, plastic package. They are ideally suited for high density applications and eliminates the need for through-the-board mounting.

- Convenient plastic SOIC-8 surface mountable package style
- Closely matched current transfer ratios
- Minimum  $V_{(BR)CEO}$  of 70 volts guaranteed
- Standard SOIC-8 footprint, with a 0.050-inch lead spacing
- Compatible with dual wave, vapor phase and IR reflow soldering
- High input - Output isolation of 3000 VAC (RMS) guaranteed
- Underwriters Laboratory (UL) recognized - File #E90700, Volume 2

[back to top](#)

### Applications

Datasheet

[Download this datasheet](#)



[e-mail this datasheet](#)



This page

[Print version](#)

### Related Links

[Request samples](#)

[Dotted line](#)

[How to order products](#)

[Dotted line](#)

[Product Change Notices](#)

[\(PCNs\)](#)

[Dotted line](#)

[Support](#)

[Dotted line](#)

[Distributor and field sales](#)

[representatives](#)

[Dotted line](#)

[Quality and reliability](#)

[Dotted line](#)

[Design tools](#)

- Feedback control circuits
- Interfacing and coupling systems of different potentials and impedances
- General purpose switching circuits
- Monitor and detection circuits

[back to top](#)

#### Ordering information

The following options can be ordered with this part:

Option	Order Entry Identifier	Description
R1	R1	Surface-Mount Lead Bend Tape and Reel (500-pc reel)
R2	R2	Surface-Mount Lead Bend Tape and Reel (2500-pc reel)

[back to top](#)

#### Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
MOC207-M	Full Production	\$0.264	SOIC	8	RAIL
MOC207R1-M	Full Production	\$0.273	SOIC	8	TAPE REEL
MOC207R2-M	Full Production	\$0.273	SOIC	8	TAPE REEL

\* 1,000 piece Budgetary Pricing

[back to top](#)

#### Safety agency certificates

Certificate	Agency	
<a href="#">8460,8461</a> (171 K)	BSI	British Standards Institution
<a href="#">136616</a> (161 K)	VDE	VDE Pruf-und Zertifizierungsinstitut
<a href="#">E90700, Vol. 2</a> (254 K)	UL	Underwriters Laboratories Inc.

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |  
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

---

[© Copyright 2002 Fairchild Semiconductor](#)

[Last updated: April 7, 2002](#)

---

Fairchild Semiconductor

SEARCH | [Parametric](#) | [Cross Reference](#)[space](#)[Product Folders and](#)[Applica](#)[find products](#)[Home >> Find products >>](#)[Products groups](#)[Analog and Mixed](#)[Signal](#)[Discrete](#)[Interface](#)[Logic](#)[Microcontrollers](#)[Non-Volatile](#)[Memory](#)[Optoelectronics](#)[Markets and](#)[applications](#)[New products](#)[Product selection and](#)[parametric search](#)[Cross-reference](#)[search](#)[technical information](#)[buy products](#)[technical support](#)[my Fairchild](#)[company](#)

MOC208-M

SO8 Phototransistor Coupler

## Contents

[General description](#) | [Applications](#) | [Ordering information](#) | [Product status/pricing/packaging](#) | [Safety agency certificates](#)

## General description

These devices consist of a gallium arsenide infrared emitting diode optically coupled to a monolithic silicon phototransistor detector, in a surface mountable, small outline, plastic package. They are ideally suited for high density applications and eliminates the need for through-the-board mounting.

- Convenient plastic SOIC-8 surface mountable package style
- Closely matched current transfer ratios
- Minimum  $V_{(BR)CEO}$  of 70 volts guaranteed
- Standard SOIC-8 footprint, with a 0.050-inch lead spacing
- Compatible with dual wave, vapor phase and IR reflow soldering
- High input - Output isolation of 3000 VAC (RMS) guaranteed
- Underwriters Laboratory (UL) recognized - File #E90700, Volume 2

[back to top](#)

## Applications

## Datasheet

[Download this datasheet](#)[PDF](#)[e-mail this datasheet](#)[\[E-](#)

This page

[Print version](#)

## Related Links

[Request samples](#)[Dotted line](#)[How to order products](#)[Dotted line](#)[Product Change Notices](#)[\(PCNs\)](#)[Dotted line](#)[Support](#)[Dotted line](#)[Distributor and field sales](#)[representatives](#)[Dotted line](#)[Quality and reliability](#)[Dotted line](#)[Design tools](#)

- Feedback control circuits
- Interfacing and coupling systems of different potentials and impedances
- General purpose switching circuits
- Monitor and detection circuits

[back to top](#)

#### Ordering information

The following options can be ordered with this part:

Option	Order Entry Identifier	Description
R1	R1	Surface-Mount Lead Bend Tape and Reel (500-pc reel)
R2	R2	Surface-Mount Lead Bend Tape and Reel (2500-pc reel)

[back to top](#)

#### Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
MOC208-M	Full Production	\$0.264	SOIC	8	RAIL
MOC208R1-M	Full Production	\$0.273	SOIC	8	TAPE REEL
MOC208R2-M	Full Production	\$0.273	SOIC	8	TAPE REEL

\* 1,000 piece Budgetary Pricing

[back to top](#)

#### Safety agency certificates

Certificate	Agency	
<a href="#">8460,8461</a> (171 K)	BSI	British Standards Institution
<a href="#">136616</a> (161 K)	VDE	VDE Pruf-und Zertifizierungsinstitut

[back to top](#)



[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |  
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

---

[© Copyright 2002 Fairchild Semiconductor](#)

[Last updated: April 7, 2002](#)

---

Fairchild Semiconductor

SEARCH | [Parametric](#) | [Cross Reference](#)[space](#)[Product Folders and](#)[Applica](#)[find products](#)[Home](#) >> [Find products](#) >>[Products groups](#)[Analog and Mixed](#)[Signal](#)[Discrete](#)[Interface](#)[Logic](#)[Microcontrollers](#)[Non-Volatile](#)[Memory](#)[Optoelectronics](#)[Markets and](#)[applications](#)[New products](#)[Product selection and](#)[parametric search](#)[Cross-reference](#)[search](#)[technical information](#)[buy products](#)[technical support](#)[my Fairchild](#)[company](#)

MOC205-M

SO8 Phototransistor Coupler

## Contents

[General description](#) | [Applications](#) | [Ordering information](#) | [Product status/pricing/packaging](#) | [Safety agency certificates](#)

## General description

These devices consist of a gallium arsenide infrared emitting diode optically coupled to a monolithic silicon phototransistor detector, in a surface mountable, small outline, plastic package. They are ideally suited for high density applications and eliminates the need for through-the-board mounting.

- Convenient plastic SOIC-8 surface mountable package style
- Closely matched current transfer ratios
- Minimum  $V_{(BR)CEO}$  of 70 volts guaranteed
- Standard SOIC-8 footprint, with a 0.050-inch lead spacing
- Compatible with dual wave, vapor phase and IR reflow soldering
- High input - Output isolation of 3000 VAC (RMS) guaranteed
- Underwriters Laboratory (UL) recognized - File #E90700, Volume 2

[back to top](#)

## Applications

## Datasheet

[Download this datasheet](#)

PDF

[e-mail this datasheet](#)

[E-]

This page

[Print version](#)

## Related Links

[Request samples](#)[Dotted line](#)[How to order products](#)[Dotted line](#)[Product Change Notices](#)[\(PCNs\)](#)[Dotted line](#)[Support](#)[Dotted line](#)[Distributor and field sales](#)[representatives](#)[Dotted line](#)[Quality and reliability](#)[Dotted line](#)[Design tools](#)

- Feedback control circuits
- Interfacing and coupling systems of different potentials and impedances
- General purpose switching circuits
- Monitor and detection circuits

[back to top](#)

#### Ordering information

The following options can be ordered with this part:

Option	Order Entry Identifier	Description
R1	R1	Surface-Mount Lead Bend Tape and Reel (500-pc reel)
R2	R2	Surface-Mount Lead Bend Tape and Reel (2500-pc reel)

[back to top](#)

#### Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
MOC205-M	Full Production	\$0.264	SOIC	8	RAIL
MOC205R1-M	Full Production	\$0.273	SOIC	8	TAPE REEL
MOC205R2-M	Full Production	\$0.273	SOIC	8	TAPE REEL

\* 1,000 piece Budgetary Pricing

[back to top](#)

#### Safety agency certificates

Certificate	Agency	
<a href="#">8460,8461</a> (171 K)	BSI	British Standards Institution
<a href="#">136616</a> (161 K)	VDE	VDE Pruf-und Zertifizierungsinstitut
<a href="#">E90700, Vol. 2</a> (254 K)	UL	Underwriters Laboratories Inc.

[back to top](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |  
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

---

[© Copyright 2002 Fairchild Semiconductor](#)

[Last updated: April 7, 2002](#)

---