

# NEC/CEL Optocouplers



CEL California Eastern Laboratories

### Applications:

- Can be used as an interface circuit for various instrumentations and control equipment in the following:
- AC line/digital logic
  - Twisted pair line receiver
  - Digital logic/digital logic
  - Telephone/telegraph line receiver

### Features:

- High isolation voltage
- High current transfer ratio
- Low cost
- High speed switching

### Safety Standards:

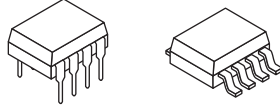
UL = UL Recognized (UL File No: E72422(S))  
 UL/VDE = UL Recognized & VDE Recognized  
 UL/BSI = UL Recognized & BSI Approved  
 UL File No.: E72422(S) / BSI Approved No.: 7112/7420



This product is RoHS compliant.



RoHS Compliant



## DARLINGTON TRANSISTOR, HIGH VCEO OPTOCOUPLEDERS

### ◆ Surface Mount

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	NEC/CEL Part No.	Fig.	Package	Safety Standard	IF (mA)	V <sub>CEO</sub> (V)	V <sub>ECO</sub> (V)	Typical Rise/Fall t <sub>r</sub> / t <sub>f</sub> (μs)	Current Transfer Ratio %	Price Each				
										1	10	100	500	
<b>DC Devices</b>														
◆ 551-PS2533-1-A	PS2533-1-A	A	DIP-4	UL/BSI	80	350	6.0	100/100	1500 to 6500	1.46	1.31	1.11	.96	
◆ 551-PS2732-1-A	PS2732-1-A	A	SOP-4	UL/BSI	50	300	6.0	100/100	1500 to 6500	1.18	1.01	.87	.74	
◆ 551-PS2832-1-A	PS2832-1-A	A	SSOP-4	UL/BSI	50	300	0.3	20/5.0	400 to 4500	1.01	.87	.75	.64	
◆ 551-PS2833-1-A	PS2833-1-A	A	SSOP-4	UL/BSI	50	350	0.3	20/5.0	400 to 4500	1.81	1.56	1.34	1.14	
◆ 551-PS2833-4-A	PS2833-4-A	B	SSOP-16	UL/BSI	50	350	0.3	20/5.0	400 to 4500	4.33	3.67	3.31	2.95	
◆ 551-PS2933-1-A	PS2933-1-A	A	MiniFlat-4	UL/BSI	50	350	0.3	20/5.0	400 to 4500	1.86	1.61	1.38	1.17	

## HIGH SPEED DIGITAL OPTOCOUPLEDERS

### ◆ Surface Mount

For quantities of 1000 and up, call for quote.

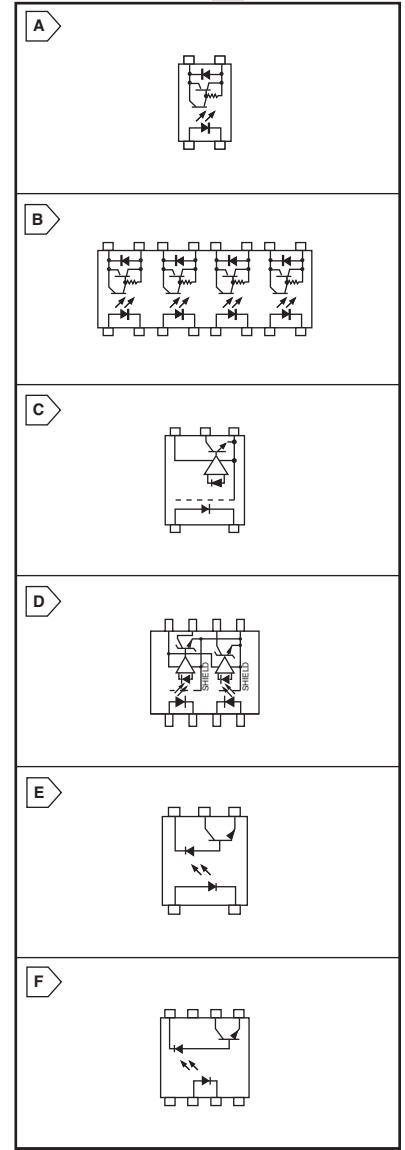
MOUSER STOCK NO.	NEC/CEL Part No.	Fig.	Package	Safety Standard	Digital Speed (Mbps)	VCC Range (V)	Isolation Voltage (VRMS)	Prop. Delay (L/H) (Typ.) (ns)	Threshold Input Curr. (Typ.) (mA)	Price Each				
										1	10	100	500	
<b>10kV/us Minimum Noise Immunity</b>														
◆ 551-PS9117-A	PS9117-A	C	SOP-5	UL	10	4.5 to 5.5	2500	35/40	2	3.24	3.06	2.76	2.46	
◆ 551-PS9121-AX	PS9121-AX	C	SOP-5	UL/VDE	10	2.7 to 5.5	2500	43/46	30	2.86	2.65	2.12	1.80	
◆ 551-PS9817-2-AX	PS9817-2-AX	D	SO-8	UL	10	4.5 to 5.5	2500	40/45	2.0	3.15	2.67	2.41	2.14	

## HIGH SPEED ANALOG OPTOCOUPLEDERS

### ◆ Surface Mount

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	NEC/CEL Part No.	Fig.	Package	Safety Standard	Analog Speed (Mbps)	Isolation Voltage (VRMS)	Prop. Delay (Typ.) (us)	Forward Current (Max.) (mA)	Current Transfer Ratio %	Price Each				
										1	10	100	500	
<b>High Noise Immunity</b>														
◆ 551-PS8103-A	PS8103-A	E	SOP-5	UL	0.2	2500	1	50	10 to 30	1.76	1.51	1.30	1.11	
◆ 551-PS8602L-AX	PS8602L-AX	F	DIP-8	UL	1	5000	0.5	25	15 (min.)	2.95	2.64	2.20	1.87	



## LASER DIODES

### NX7338BF-AA-Features:

- High output power  
P<sub>o</sub> = 110mW @ I<sub>sp</sub> = 400 mA\*1
- Long wavelength  
λ<sub>c</sub> = 1 310 nm

\*1 Pulse Conditions: Pluse width (PW) = 10 μs, Duty = 1%

### NX7538BF-AA-Features:

- High output power  
P<sub>o</sub> = 80mW @ I<sub>sp</sub> = 400 mA\*1
- Long wavelength  
λ<sub>c</sub> = 1 550 nm

\*1 Pulse Conditions: Pluse width (PW) = 10 μs, Duty = 1%



RoHS Compliant

### \* Multiple Quantum Well structured Fabry-Perot Laser Diode Coaxial Module

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	NEC/CEL Part No.	Package	Fiber Type	Price Each			
				1	2	5	10
551-NX7338BF-AA-AZ	NX7338BF-AA-AZ	Laser Diode Module 1 310NM 110m W	Single Mode	210.00	203.00	196.00	189.00
551-NX7538BF-AA-AZ	NX7538BF-AA-AZ	Laser Diode Module 1 550NM 80mW	Single Mode	225.00	217.50	210.00	202.50

## PHOTO DIODES

### Features:

- **Small Dark Current:**  
I<sub>o</sub> = 500 nA
- **Small Terminal Capacitance:**  
C<sub>T</sub> = 0.35 pF at 0.9 V<sub>BR</sub>
- **High Quantum Efficiency:**  
μ = 90% at λ = 1310 nm, M = 1  
μ = 77% at λ = 1550 nm, M = 1
- **High Speed Responde:**  
f<sub>c</sub> = 2.5 GHz at 0.9 V<sub>BR</sub>
- **Detecting Area Size:**  
ø30 μm
- **Coaxial Module with Single Mode Fiber (SM-9/125)**



RoHS Compliant

### APD In a Coaxial Package for Fiber Optic Communication and OTDR Applications

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	NEC/CEL Part No.	Package	Fiber Type	Price Each			
				1	2	5	10
551-NR8300FP-CC-AZ	NR8300FP-CC-AZ	30um InGaAs Avalanche Photo Diode	Single Mode	375.00	362.50	350.00	337.50