



SURFACE-MOUNT OPTOCOUPLER PACKAGES



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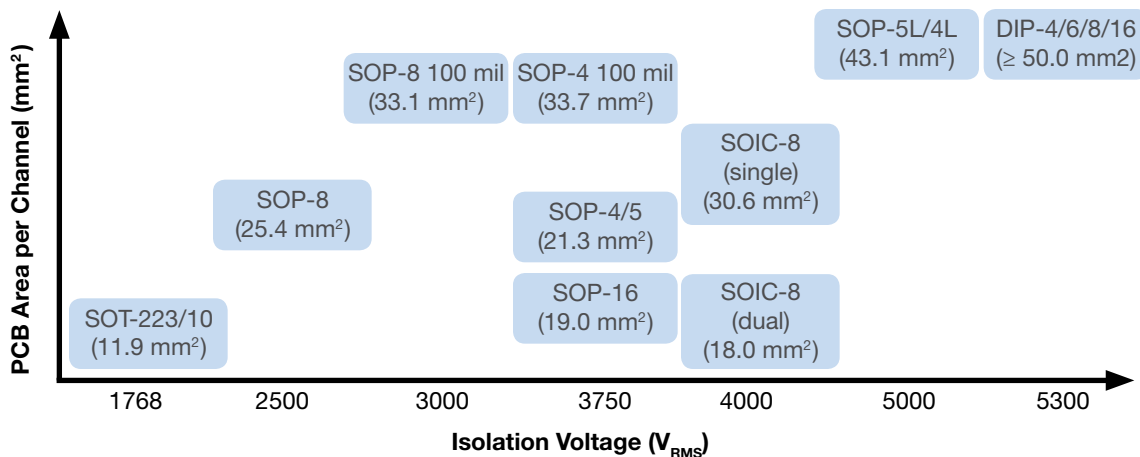


SURFACE-MOUNT

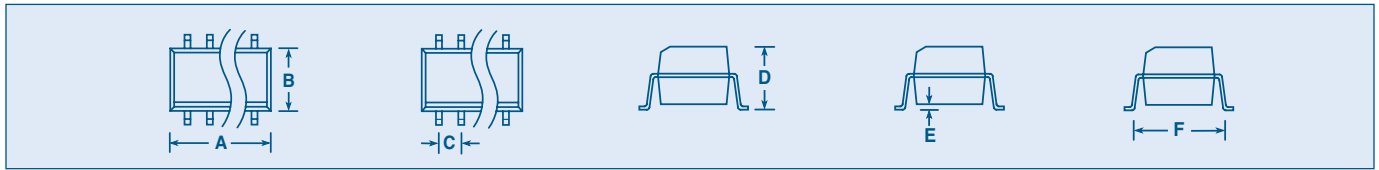
Optocoupler Packages

Vishay Semiconductors offers the industry's broadest selection of surface-mount optocoupler package options, giving designers a choice of nine small outline packages and 12 gullwing SMD DIP packages. All Vishay Semiconductors optocouplers are lead (Pb)-free.

	<p>SOP-4, SOP-8, and SOP-16 (half-pitch Miniflat): With a profile of only 2.0 mm, devices in the SOP family are the smallest surface-mount optocouplers offered by Vishay, saving as much as 63 % board space compared with equivalent devices in the DIP SMD. Available in single- and multi-channel versions.</p>
	<p>SOP-4, SOP-5, and SOP-8 (full-pitch Miniflat): These 2.0-mm thick packages offer significant PCB real estate savings compared with DIP SMD counterparts—the SOP-4 and SOP-5 are 32 % smaller, while the SOP-8 is 35% smaller.</p>
	<p>SOP-5L and SOP-4L (wide body Miniflat): This package meets the VDE's longer creepage and clearance distance requirements while maintaining a very low 2.0-mm profile. Available in 4- or 5-pin versions.</p>
	<p>SOIC-8: Available in both single and dual channels, the solder footprint is 35 % smaller than an equivalent DIP-8 SMD optocoupler.</p>
	<p>SOT-223/10: This 10-pin quad channel optocoupler requires a mere 47.6 mm² of PCB space. With Vishay's advanced packaging and wafer processing technology, it enables the industry's thinnest and most condensed quad channel.</p>
	<p>Option 7 DIP-4/6/8/16: Provides a standard SMD gullwing lead form with a maximum standoff height of 0.9 mm; available in 4-, 6-, 8-, and 16-pin versions.</p>
	<p>Option 8 DIP-4/6/8/16: Provides a wide SMD gullwing lead form with a maximum standoff height of 0.5 mm and the longer clearance distance required by VDE; available in 4-, 6-, 8-, and 16-pin versions.</p>
	<p>Option 9 DIP-4/6/8/16: Provides a standard SMD gullwing lead form with a maximum standoff height of 0.25 mm, slightly lower than option 7; available with 4-, 6-, 8-, and 16-pin versions.</p>



SURFACE-MOUNT Optocoupler Packages



Package	A (length)	B (width)	C (pitch)	D (standoff)	E (standoff)	F (clearance)
SOP-4, SOP-5	2.8 mm	4.4 mm	1.27 mm	2.0 mm	0.1 mm	5.0 mm
SOP-8	5.8 mm	5.7 mm	1.27 mm	2.3 mm	0.1 mm	6.8 mm
SOP-16	10.4 mm	4.4 mm	1.27 mm	2.1 mm	0.1 mm	5.1 mm
SOP-4 100 mil	4.7 mm	4.8 mm	2.54 mm	2.1 mm	0.1 mm	5.1 mm
SOP-8 100 mil	9.5 mm	4.6 mm	2.54 mm	2.0 mm	0.1 mm	5.5 mm
SOP-4L	4.1 mm	7.5 mm	2.54 mm	2.3 mm	0.1 mm	8.2 mm
SOP-5L	4.1 mm	7.5 mm	1.27 mm	2.3 mm	0.1 mm	8.2 mm
SOIC-8 (single/dual channel)	4.9 mm	3.9 mm	1.27 mm	3.5 mm	0.2 mm	4.3 mm
SOIC-8 (dual channel)	5.9 mm	3.9 mm	1.27 mm	3.5 mm	0.2 mm	4.3 mm
SOT-223/10	6.5 mm	3.6 mm	1.27 mm	1.7 mm	0.1 mm	5.5 mm
DIP-4 Option 7	4.8 mm	6.8 mm	2.54 mm	4.6 mm	0.9 mm	8.0 mm
DIP-4 Option 8	4.8 mm	6.8 mm	2.54 mm	4.3 mm	0.5 mm	10.0 mm
DIP-4 Option 9	4.8 mm	6.8 mm	2.54 mm	4.2 mm	0.25 mm	8.0 mm
DIP-6 Option 7	8.7 mm	6.5 mm	2.54 mm	4.6 mm	0.9 mm	8.0 mm
DIP-6 Option 8	8.7 mm	6.5 mm	2.54 mm	4.3 mm	0.5 mm	10.0 mm
DIP-6 Option 9	8.7 mm	6.5 mm	2.54 mm	4.2 mm	0.25 mm	8.0 mm
DIP-8 Option 7	10.0 mm	6.8 mm	2.54 mm	4.6 mm	0.9 mm	8.0 mm
DIP-8 Option 8	10.0 mm	6.8 mm	2.54 mm	4.3 mm	0.5 mm	10.0 mm
DIP-8 Option 9	10.0 mm	6.8 mm	2.54 mm	4.2 mm	0.25 mm	8.0 mm
DIP-16 Option 7	20.1 mm	6.8 mm	2.54 mm	4.6 mm	0.9 mm	8.0 mm
DIP-16 Option 8	20.1 mm	6.8 mm	2.54 mm	4.3 mm	0.5 mm	10.0 mm
DIP-16 Option 9	20.1 mm	6.8 mm	2.54 mm	4.2 mm	0.25 mm	8.0 mm

Package Type	Safety Agency Approvals				
	UL	CSA	VDE	BSI	FIMKO
SOP-4, SOP-5 Miniflat 100 mil pitch	•	•	•	•	•
SOP-8, Miniflat 100 mil pitch	•	•			•
SOP-4, Miniflat	•	•			•
SOP-8, Miniflat	•	•			•
SOP-16, Miniflat	•	•	•		•
SOP-4L, Wide Body Miniflat	•	•	•	•	•
SOP-5L, Wide Body Miniflat	•	•	•	•	•
SOIC-8	•	•	•		•
SOT-223/10	•	•			
DIP with Option 7, 8, 9	•	•	•	•	•

Please visit www.vishay.com/optocouplers/ for further information.

- Datasheets
- Tape and reel specifications
- Application notes
- Safety agency certificates
- Recommended solder foot pads

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