

# Full Material Declaration for PDZ4.3BGW

Date	2025-06-24 20:53:35 CEST+0200
Package	<u>SOD123</u> (SOD2): 1.15 mm × 1.6 mm × 2.675 mm
Description	PDZ-GW series
Datasheet	<a href="https://assets.nexperia.com/documents/data-sheet/PDZ-GW_SER.pdf">https://assets.nexperia.com/documents/data-sheet/PDZ-GW_SER.pdf</a>
OPNs	934071083118: PDZ4.3BGWJ (RFS), MSL 1 934071083115: PDZ4.3BGWX (RFS), MSL 1
Automotive-qualified	Yes
UL-94	<a href="https://iq.ulprospector.com/en/profile?e=577771">https://iq.ulprospector.com/en/profile?e=577771</a>



REACH	Compliant with Regulation 1907/2006/EC (REACH). Does not contain REACH SVHC substances exceeding 1000 ppm of the article.
EU RoHS	Compliant with Directive 2011/65/EU, amended by Directive 2015/863/EU, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ('RoHS 2 amended') without exemptions.
CN RoHS	Compliant with Chinese ACPEIP (Administration on the Control of Pollution Caused by Electronic Information Products) (CN RoHS) without exemptions.
ELV	Compliant with Directive 2000/53/EC, amended by Directive 2023/533, on end of life vehicles (ELV) without exemptions.
PFAS	Does not contain any intentionally added per- and polyfluoroalkyl substances (PFAS).
CA Proposition 65	Contains California Proposition 65 substance(s) [at the article level]: substance 1333-86-4: 334 ppm; substance 7439-92-1: <1 ppm;
IEC 62474	Contains IEC 62474 substance(s) [at the article level]: substance 1333-86-4: 334 ppm; substance 7439-92-1: <1 ppm;
Precious Metals	Contains precious metals [Ag, Au, Pd, Pt; at the article level]: substance 7440-22-4: 4996 ppm;
GADSL	Contains 'Global Automotive Declarable Substances List' (GADSL) substances: substance 7440-50-8: 298595 ppm; substance 7440-22-4: 4996 ppm; substance 7439-92-1: 1 ppm;
RHF Indicator	D: Lead-free and halogen-free according to Nexperia's halogen-free definition.

Material	Mat. Group	Substance	CAS No.	Mass / mg	Mass-% of Material	Mass-% of Part
Die	Doped silicon	Silicon (Si)	7440-21-3	0.030000	100.000000	0.248891
<b>Die Total</b>				<b>0.030000</b>	<b>100.000000</b>	<b>0.248891</b>
Lead Frame	Copper alloy	Copper (Cu)	7440-50-8	3.533178	94.470000	29.312553
Lead Frame	Copper alloy	Iron (Fe)	7439-89-6	0.077792	2.080000	0.645391
Lead Frame	Copper alloy	Zinc (Zn)	7440-66-6	0.004862	0.130000	0.040337
Lead Frame	Copper alloy	Phosphorus (P)	7723-14-0	0.001496	0.040000	0.012411
<i>Base Alloy Total</i>				<i>3.617328</i>	<i>96.720000</i>	<i>30.010692</i>
Lead Frame	Pure metal layer	Copper (Cu)	7440-50-8	0.062458	1.670000	0.518175
<i>Pre-Plating 1 Total</i>				<i>0.062458</i>	<i>1.670000</i>	<i>0.518175</i>
Lead Frame	Pure metal layer	Silver (Ag)	7440-22-4	0.060214	1.610000	0.499558
<i>Pre-Plating 2 Total</i>				<i>0.060214</i>	<i>1.610000</i>	<i>0.499558</i>
<b>Lead Frame Total</b>				<b>3.740000</b>	<b>100.000000</b>	<b>31.028425</b>
Mould Compound	Filler	Silica	7631-86-9	5.810400	72.000000	48.205230
Mould Compound	Polymer	o-Cresol-epichlorohydrin-formaldehyde copolymer	29690-82-2	1.210500	15.000000	10.042756
Mould Compound	Polymer	Formaldehyde-phenol copolymer	9003-35-4	0.807000	10.000000	6.695171
Mould Compound	Additive	Non-declarable		0.234030	2.900000	1.941599
Mould Compound	Pigment	Carbon black	1333-86-4	0.004035	0.050000	0.033476
Mould Compound	Additive	Triphenylphosphine	603-35-0	0.004035	0.050000	0.033476
<b>Mould Compound Total</b>				<b>8.070000</b>	<b>100.000000</b>	<b>66.951708</b>

Material	Mat. Group	Substance	CAS No.	Mass / mg	Mass-% of Material	Mass-% of Part
Post-Plating	Tin solder	Tin (Sn)	7440-31-5	0.209874	99.940000	1.741192
Post-Plating	Impurity	Non-declarable		0.000117	0.055500	0.000971
Post-Plating	Impurity	Lead (Pb)	7439-92-1	0.000009	0.004500	0.000075
Post-Plating Total				0.210000	100.000000	1.742238
Wire	Pure metal	Copper (Cu)	7440-50-8	0.003464	100.000000	0.028738
Wire Total				0.003464	100.000000	0.028738
PDZ4.3BGW Total				12.053464	100.000000	100.000000

部件名称 Material	有毒或有害物质和元素 (Toxic or hazardous substances and elements)					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr <sup>6+</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片 (Die)	○	○	○	○	○	○
基底合金 (Base Alloy)	○	○	○	○	○	○
预镀层1 (Pre-Plating 1)	○	○	○	○	○	○
预镀层2 (Pre-Plating 2)	○	○	○	○	○	○
模封料 (Mould Compound)	○	○	○	○	○	○
后镀层 (Post-Plating)	○	○	○	○	○	○
导线 (Wire)	○	○	○	○	○	○

- 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下

○ Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
- 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求

× Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.
- 该半导体产品具有无限期的环保使用期限 (EFUP) 。

This semiconductor product has an indefinite environmental friendly use period (EFUP).

All information in this document is furnished for exploratory or indicative purposes only. All information in this document is believed to be accurate and reliable. However, Nexperia does not give any representations or warranties as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. Nexperia may make changes to information published in this document at any time and without notice. Minor deviations may occur in the products from different manufacturing location. This document supersedes and replaces all information supplied prior to the publication hereof. Nothing in this document may be interpreted or construed as an offer to sell products that is open for acceptance or the grant, conveyance or implication of any license under any copyrights, patents or other industrial or intellectual property rights.