

Full Material Declaration for PDZ3.3BGW

| | |
|----------------------|---|
| Date | 2025-06-24 20:53:33 CEST+0200 |
| Package | <u>SOD123</u> (SOD2): 1.15 mm × 1.6 mm × 2.675 mm |
| Description | PDZ-GW series |
| Datasheet | https://assets.nexperia.com/documents/data-sheet/PDZ-GW_SER.pdf |
| OPNs | 934071059115: PDZ3.3BGWX (RFS), MSL 1 934071059118: PDZ3.3BGWJ (RFS), MSL 1 |
| Automotive-qualified | Yes |
| UL-94 | https://iq.ulprospector.com/en/profile?e=577771 |



| | |
|-------------------|--|
| 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 |
| Die Total | | | | 0.030000 | 100.000000 | 0.248891 |
| 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> |
| Lead Frame Total | | | | 3.740000 | 100.000000 | 31.028425 |
| 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 |
| Mould Compound Total | | | | 8.070000 | 100.000000 | 66.951708 |

| 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 |
| PDZ3.3BGW 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 ⁶⁺) | 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.