

# MATERIAL DECLARATION SHEET

|                 |                                |     |                |                                                                                     |
|-----------------|--------------------------------|-----|----------------|-------------------------------------------------------------------------------------|
| Material Number | PTVS3-430C-TH                  |     |                |  |
| Product Line    | Semiconductor Products         |     |                |                                                                                     |
| Compliance Date | September 1 <sup>st</sup> 2014 |     |                |                                                                                     |
| RoHS Compliant  | Yes                            | MSL | Not Applicable |                                                                                     |

| No.          | Construction Element (subpart) | Homogenous Material | Material Weight (g) | Homogenous Material/ Substances                                                                                                            | CASRN if applicable                                                                             | Materials Mass %                                        | Material Mass % of total unit wt.                    | Subpart Mass % of total unit wt. |
|--------------|--------------------------------|---------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------|----------------------------------|
| 1            | Encapsulation                  | Epoxy Resin         | 0.559500            | Bisphenol Copolymer<br>Alumina Trihydrate<br>Fused Silica<br>Hydrated Iron Oxide<br>Titanium Dioxide<br>Melamine Cyanurate<br>Amine Adduct | 1675-54-3<br>25085-99-8<br>14464-46-1<br>40039-93-8<br>51274-00-1<br>13463-67-7<br>Trade Secret | 60.00<br>15.00<br>20.00<br>1.50<br>1.50<br>1.50<br>0.50 | 7.06<br>1.76<br>2.35<br>0.18<br>0.18<br>0.18<br>0.06 | 11.76                            |
| 2            | Electrodes                     | Copper              | 2.940894            | Copper<br>Silver<br>Other                                                                                                                  | 7440-50-8<br>7440-22-4<br>-                                                                     | 99.10<br>0.40<br>0.50                                   | 61.26<br>0.25<br>0.31                                | 61.82                            |
| 3            | Terminations                   | Copper              | 0.469460            | Copper<br>Other                                                                                                                            | 7440-50-8<br>-                                                                                  | 99.50<br>0.50                                           | 9.82<br>0.05                                         | 9.87                             |
| 4            | Termination Finish             | Silver              | 0.002696            | Silver                                                                                                                                     | 7440-22-4                                                                                       | 100.00                                                  | 0.06                                                 | 0.06                             |
| 5            | Chip                           | Silicon Die         | 0.336158            | Silicon<br>Aluminium<br>Nickel<br>Gold                                                                                                     | 7440-21-3<br>7429-90-5<br>7440-02-0<br>7440-57-5                                                | 86.30<br>4.79<br>8.49<br>0.41                           | 6.10<br>0.34<br>0.60<br>0.03                         | 7.07                             |
| 6            | Die Attach                     | Solder              | 0.176904            | Lead<br>Tin<br>Silver                                                                                                                      | 7439-92-1<br>7440-31-5<br>7440-22-4                                                             | 92.50<br>5.00<br>2.50                                   | 3.44<br>0.19<br>0.09                                 | 3.72                             |
| 7            | Die Coating                    | Silicone            | 0.271488            | Polysiloxane<br>Chromium Sesquioxide<br>Fumed Silica<br>Filler                                                                             | 63148-62-9<br>1308-38-9<br>112945-52-5<br>trade secret                                          | 22.11<br>5.67<br>11.11<br>61.11                         | 1.26<br>0.32<br>0.63<br>3.49                         | 5.71                             |
| Total Weight |                                |                     | 4.757100            |                                                                                                                                            |                                                                                                 |                                                         |                                                      |                                  |