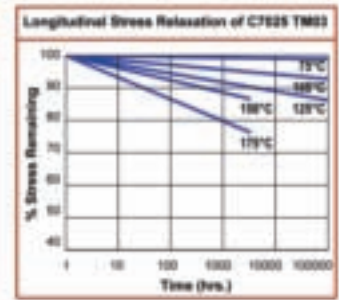


## High Temperature / High Current Terminals

In newer automotive applications, operating temperatures and power throughput are steadily increasing. Most of today's terminals designed for such demanding applications are made of beryllium copper, which is very expensive. Zierick's response is a new way to create economically priced high temperature terminals. These components can operate at higher temperatures and have a higher current rating than their standard equivalents. They are stamped from an alloy with high temperature, high conductivity and improved stress relaxation properties. The stress relaxation feature is far superior to that of cartridge brass in elevated

| Physical and Engineering Properties of C7025 |   |   |
|--|---|---|
| Physical Properties                          | English Units   | Metric Units  |
| Melting Point (Liquid)                       | 2003°F  | 1096°C  |
| Melting Point (Solid)                        | 1967°F  | 1075°C  |
| Density                                      | .318 lb/in <sup>3</sup>                                   | 8.82 g/cm <sup>3</sup>                                    |
| Thermal Conductivity                         | 85-110 Btu-in/ft <sup>2</sup> -in <sup>2</sup> -°F @ 88°F | 0.35-0.46 cal/cm <sup>2</sup> -cm <sup>2</sup> -°C @ 20°C |
| Electrical Resistivity                       | 22.9 uhm-circ mil/ft @ 88°F                               | 147 uhm-cm @ 20°C   |
| Electrical Conductivity                      |   | 4.2 mhos/cm-cm @ 20°C                                     |
| TRO3   | 40% IACS @ 88°F   | 0.23 megohm-cm @ 20°C                                     |
| TMO3   | 40% IACS @ 88°F   | 0.23 megohm-cm @ 20°C                                     |
| TMO2   | 40% IACS @ 88°F   | 0.23 megohm-cm @ 20°C                                     |
| TMO1   | 40% IACS @ 88°F   | 0.23 megohm-cm @ 20°C                                     |
| Modulus of Elasticity (Tensile)              | 18,000,000 psi  | 13,000 kg/cm <sup>2</sup>                                 |



temperatures and heating applications.

Zierick's Part Number 1275 is standard, but many other parts can be produced with the same properties. This material easily lends itself to being used with our existing tooling and fabrication methods with little or no additional cost to the custom receptacle required.

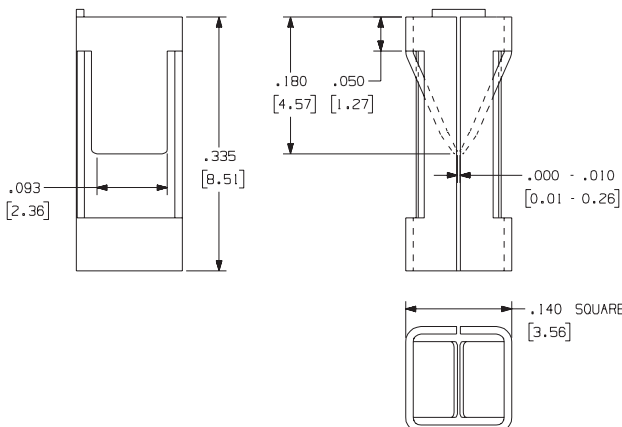
Stress relaxation is a critical inherent property of the material since the spring design feature in many receptacles is needed to maintain reliable connections at elevated temperatures. The tables above illustrate the various physical attributes of Alloy C7025. Call Zierick for more information.

### Part Numbers 1275, 6275, 1275T, 1275TH

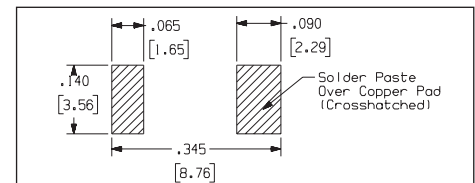
Zierick recommends .006" stencil thickness for most applications. For other stencil thicknesses, call Zierick's product development department.

For drawings of our taped parts, please search for this part number on our website, [www.zierick.com](http://www.zierick.com).

|                                  |  |
|----------------------------------|--|
| <b>Loose Part No.</b>            | 1275   |
| <b>Reeled Part No.</b>           | 6275   |
| <b>Taped Part No.</b>            | 1275T   1275TH   |
| <b>Mating Terminal Size</b>      | 0.025" (0.64mm) and 0.032" (0.81mm) Round or Square                    |
| <b>Mounting Type</b>             | Surface Mount  |
| <b>Material Thickness / Type</b> | 0.010" (0.25mm) CDA 70250 High Performance Alloy                       |
| <b>Standard Finish</b>           | Loose: 100% Tin over Copper<br>Reeled: 100% Tin over Copper            |
| <b>Mating Entry</b>              | Top and Bottom   |
| <b>Current Rating</b>            | 20 Amperes   |
| <b>Resistance Rating</b>         | 10mΩ Max   |
| <b>Temperature Rating</b>        | Up to 175°C  |
| <b>Feeder System</b>             | Surf-Shooter SMT™ Continuous Strip Feeder<br>Standard 24mm Tape Feeder |



#### Recommended Solder Pad Geometry for Horizontal Mount



#### Recommended Solder Pad Geometry for Vertical Mount

