



Product Training Module: Custom Parts

August 2013



Introduction

- Purpose
 - This training module is used to give an introduction to t-Global Technology's range of materials and how custom parts may be obtained
- Objectives
 - To identify the key data needed for custom part selection
- Content
 - Introduction and background to the selection and design of custom parts
- Learning time
 - 30 mins

Custom Parts

- Essentially, virtually all of t-Global's thermal products can be customized
- Common requests for customization include:
 - Thickness
 - Custom cut parts
 - Custom molded parts
 - Adhesive coatings
 - Additional functionality
- t-Global will be happy to quote for any degree of customization regardless of the volume or complexity





Thickness

- More or less all the standard thermal interface (TIM) products can be customized for thickness
- Customization of the thickness of double sided thermal adhesive tapes is also possible but will need to be reviewed on a case by case basis to evaluate the technical merit and feasibility
- All heat-spreading products can be customized for thickness in order to give optimal performance.
- Some gap filler products have a minimum thickness (see link)
- There is no theoretical upper limit for thickness for most gap fillers



Adhesive

- The majority of the gap fillers can be specified with:
 - No adhesive (natural tack)
 - One side adhesive
 - Two side adhesive
 - One side dry (no tack option)
- Different adhesive options are available:
 - Standard t-Global adhesive
 - Higher performing adhesive (for superior bonding)
 - Customer specified adhesive



Backing Layer

- It is also possible to specify a backing for most of the gap filler materials:
 - Standard release liner
 - Customer branded release liner
 - Fiber Glass
 - Aluminum foil with or without adhesive
 - Dielectric foil
 - Low surface energy film (non-tack option)

Format

- A number of different formats are available
- Generally for gap fillers maximum size is 640 x 640mm
- Material can be supplied as:
 - Standard sheets
 - 150 x 150 mm
 - 320 x 320 mm
 - 640 x 640 mm
 - 640 x 320mm
 - Die Cut Parts
 - With or without pull tabs
 - Kiss cut parts on a standard sheet



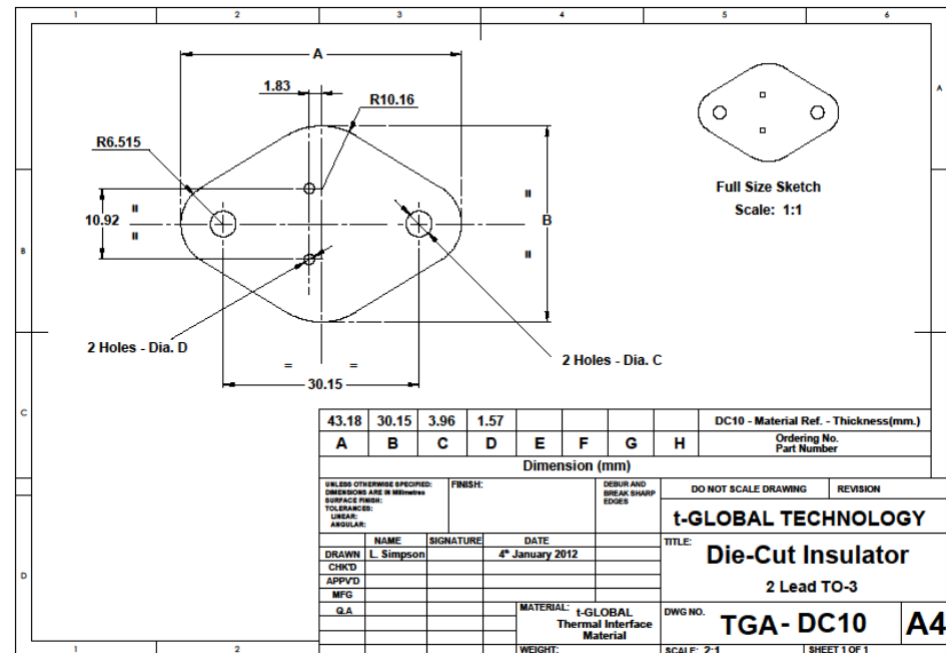
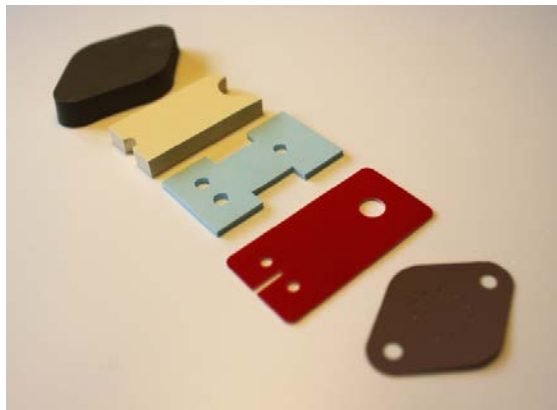


Format

- A number of the thermal interface materials can also be supplied on rolls
 - Length from 1m – 100m
 - Width 5 mm – 320mm
 - Thickness –up to 1.5mm depending on length
- Cut parts can also be supplied on rolls for a number of material options
- Cut parts with pulls tabs can also be supplied on rolls for a number of material options

Customer Cut-Parts

- T-Global can cut more or less any shape from their wide range of gap fillers, insulators, thermal tapes or electrically conductive interface pads
- In order for t-Global to prepare such parts as DXF file is required



Ordering Custom Cut-Parts

- Some examples of cut parts are shown below
- These are typical of the type of designs that can be cut using t-global's in house state of the art equipment
- Typical custom part size can be from 1 piece up to hundred of thousands.





Ordering Custom Cut Parts

- Ordering a custom part can not be simpler:
 - Select the desired material in terms of hardness and thermal conductivity
 - Send an email to Customt-GlobalProducts@digikey.com with:
 - Choice of material
 - Required thickness (in mm)
 - Adhesive requirements
 - Backing requirements



Summary

- T-global can customise cut virtually all of their product line
- The MOQ for custom parts is: 1
- Lead-time for all custom parts is: 2 weeks
- T-global's application engineers are able to support customers globally for all degrees of customisation
- Further details can be obtained from: Customt-GlobalProducts@digikikey.com