



DRC (SSC-EAGLE-4Lyr\_v1.0.0.3)

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1

2

5

6

Nr	Copper	Is
1	0.0178mm	12mil
2	0.0356mm	28mil
15	0.0356mm	12mil
16	0.0178mm	

Setup [1+2\*15+16]

Layers are combined through either *core* or *prepreg* material. **a\*b** combines layers *a* and *b* with a *core*, while **a** *prepreg*.

**Buried** and **through** vias are defined by writing ( . . . ).

**Blind** vias are defined by writing [**t** : . . . : **b**], which defines a blind via from top to layer *t* and from bottom to layer *b*.

**Example:** [2 : 1 + ( (2\*3) + (4\*16) ) ] is a multilayer setup with two cores, combining layers 2/3 and 4/16, vias going through both cores. The cores are combined through a prepreg and buried vias are produced through the prepreg. Finally layer 1 is added, with blind vias going from layer 1 to 2.

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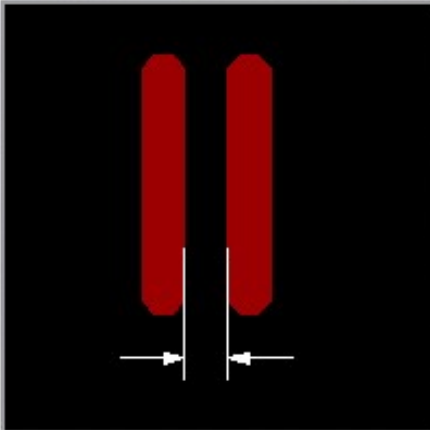
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**Different Signals**

Wire

Wire

6mil

Pad

Pad

6mil

Pad

6mil

6mil

Via

6mil

6mil

6mil

**Same Signals**

Smd

Smd

6mil

Pad

Pad

6mil

Smd

6mil

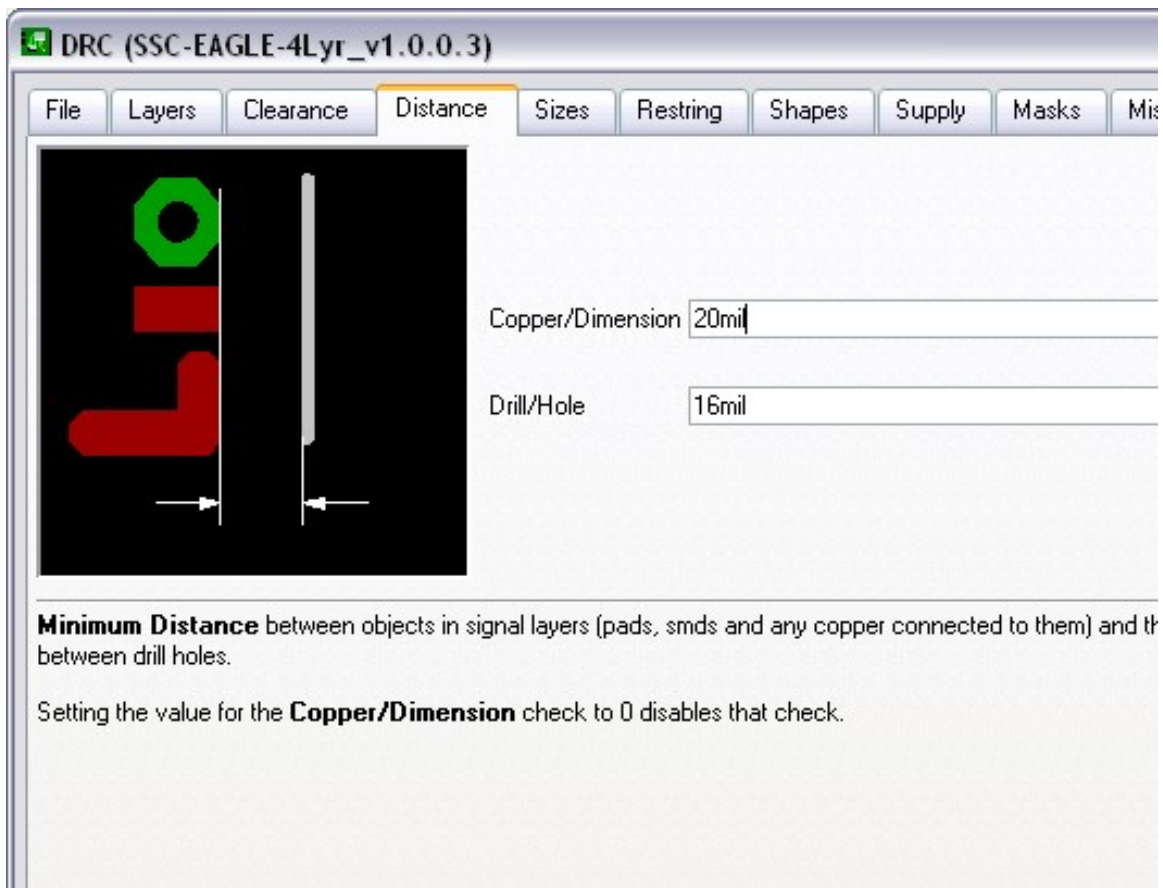
6mil

6mil

**Minimum Clearance** between objects in signal layers.

The **Same Signals** check between *Smd* and *Via* does not apply to *Micro Vias*.

Setting the values for the **Same Signals** checks to 0 disables the respective check.



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Minimum Width

6mil

Minimum Drill

8mil

Min. Micro Via

9.9898mm

Min. Blind Via Ratio

0.5

**Minimum Sizes** of objects in signal layers and of drill holes.

**Minimum Width** and **Minimum Drill** may be overwritten by larger values in the *Net classes* for specific sign

**Min. Micro Via** applies to *blind* vias that are exactly one layer deep. Typical values are in the range 50..100 than **Minimum Drill** (e.g. the default value of 9.99mm) means there are no micro vias.

**Min. Blind Via Ratio** defines the minimum drill diameter  $d$  a blind via must have if it goes through a layer of t  
manufacturers usually give this "aspect ratio" in the form **1 : 0 . 5**, where 0 . 5 would be the value that has to b

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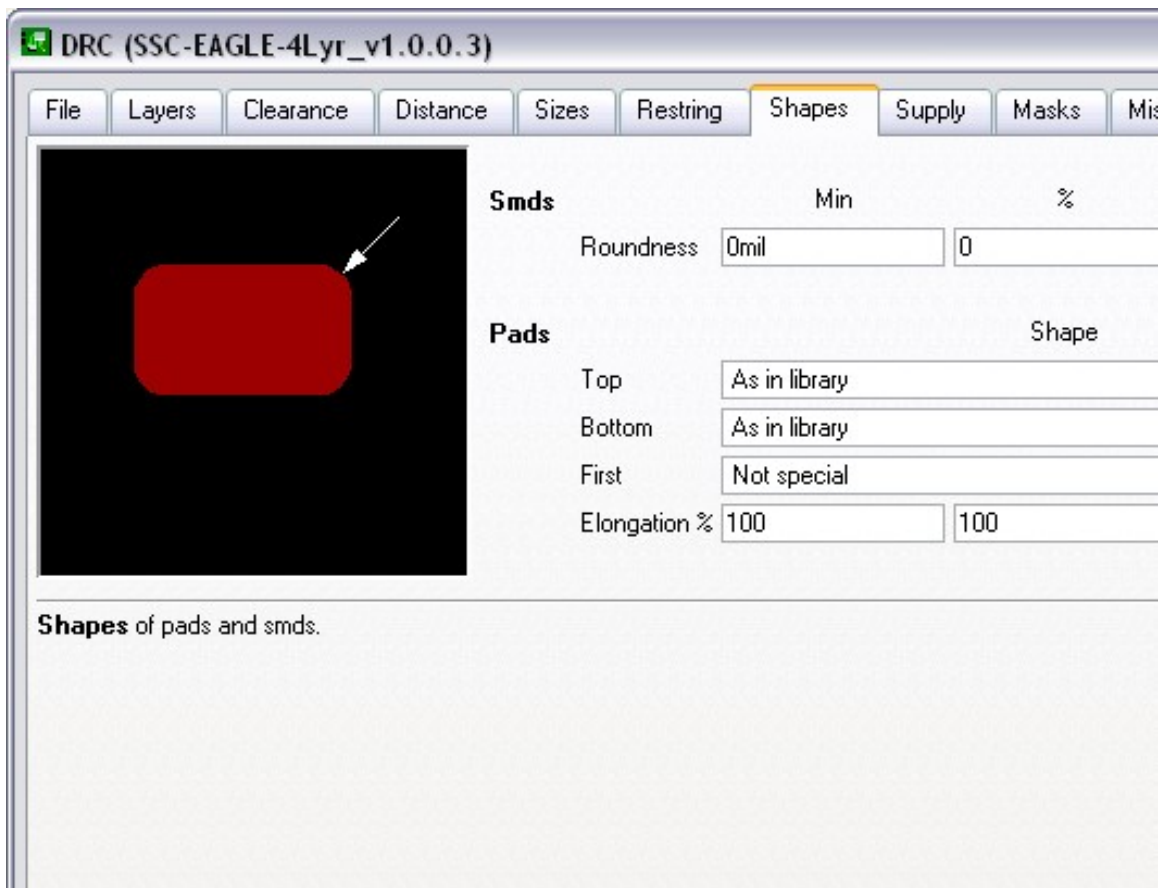
Misc

		Min	%	
<b>Pads</b>	Top	8mil	25	99%
	Inner	8mil	25	99%
	Bottom	8mil	25	99%
<b>Vias</b>	Outer	8mil	25	99%
	Inner	8mil	25	99%
<b>Micro Vias</b>	Outer	8mil	25	99%
	Inner	8mil	25	99%

**Restrings** for pads and vias are defined in percent of the drill diameter (limited by **Min** and **Max**). If the diameter would result in a larger restring, that value will be used in the outer layers.

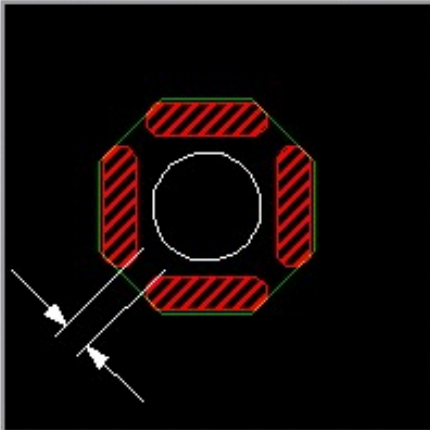
If the **Diameter** option is checked the actual pad or via diameter will be taken into account in the inner layers

**Micro Vias** are *blind* vias that are exactly one layer deep and have a drill diameter that is smaller than the **Min** defined under *Sizes* (which may be overwritten by a larger **Drill** value in the *Net classes*).



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Min

%

Gap

8mil

50

1

Isolate

Thermal

10mil

Annulus

12.5mil

Restring

☒

☐

☐ Generate thermals for vias

**Supply** symbols are generated for pads and vias in supply layers.

If a **Restring** is deactivated for **Annulus**, the resulting supply symbol will be a fully filled circle instead of a ring.

The **Gap** is defined in percent of the drill diameter (limited by **Min** and **Max**).

The **Thermal Isolate** parameter will also be used for signal polygons.

**NOTE:** The actual shape of supply symbols may be different when generating output for photoplotters that use thermal/annulus apertures!



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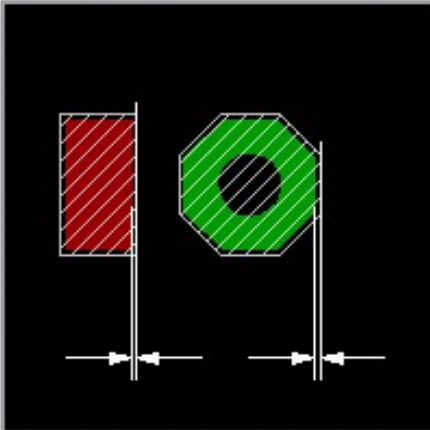
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	Min	%	
Stop	<input type="text" value="3mil"/>	<input type="text" value="100"/>	<input type="text" value="3r"/>
Cream	<input type="text" value="0mil"/>	<input type="text" value="0"/>	<input type="text" value="0r"/>
Limit	<input type="text" value="0mil"/>		

**Mask** values are defined in percent of the smaller dimension of smds, pads and vias (limited by **Min** and **Max**

**Stop** masks are generated for smds, pads and those vias that have a drill diameter that exceeds **Limit**.

**Cream** masks are generated for smds only.

