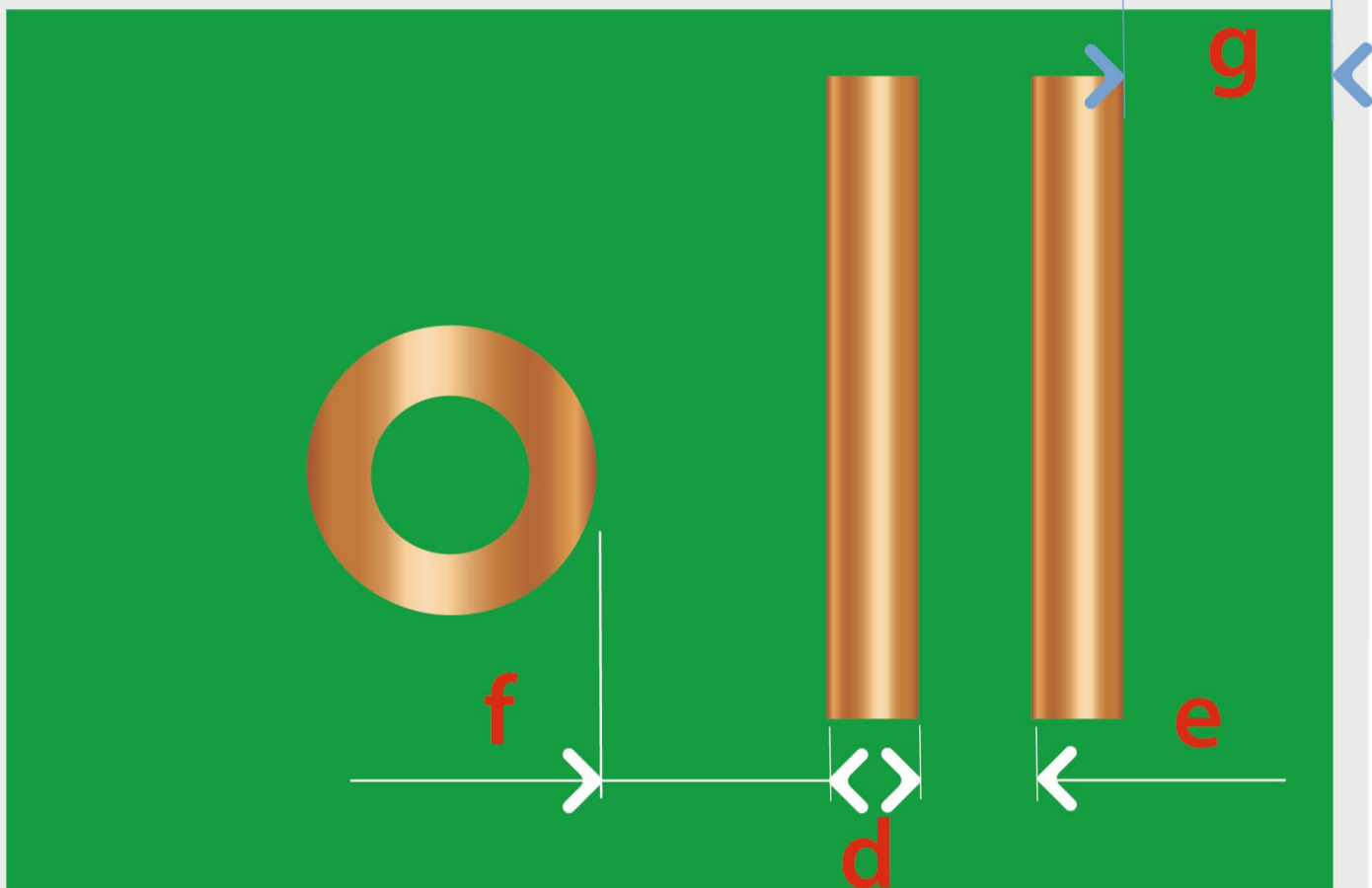
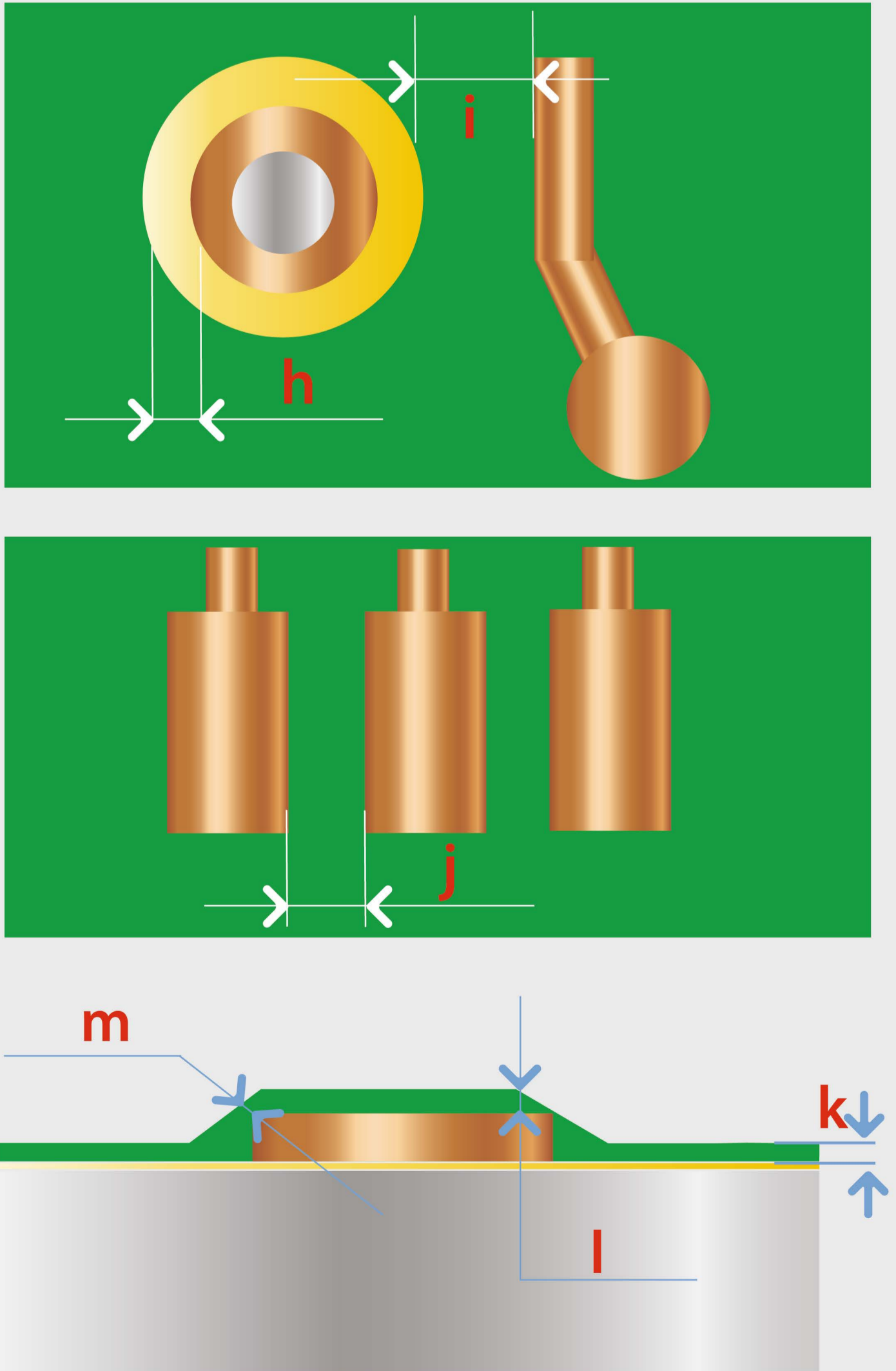


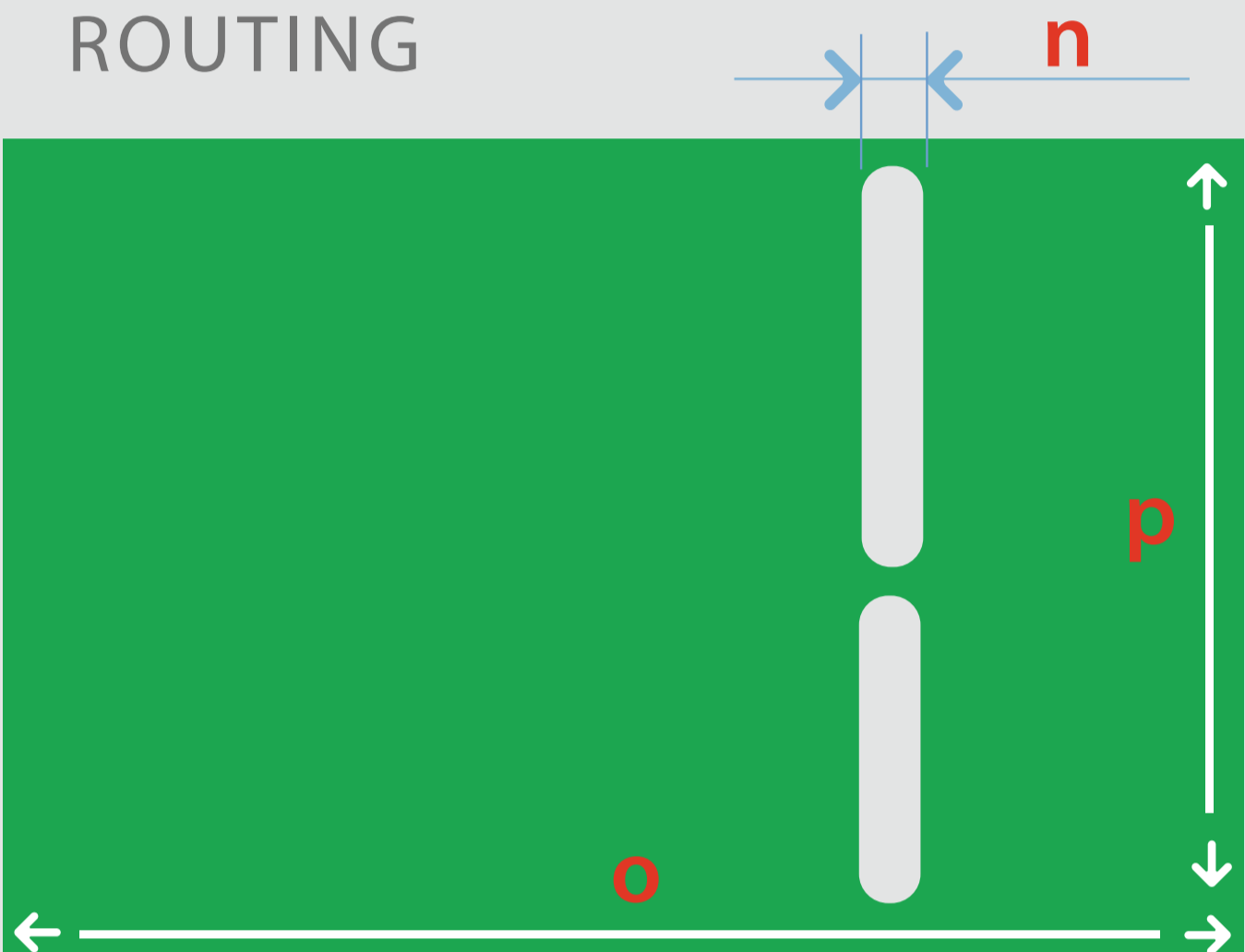
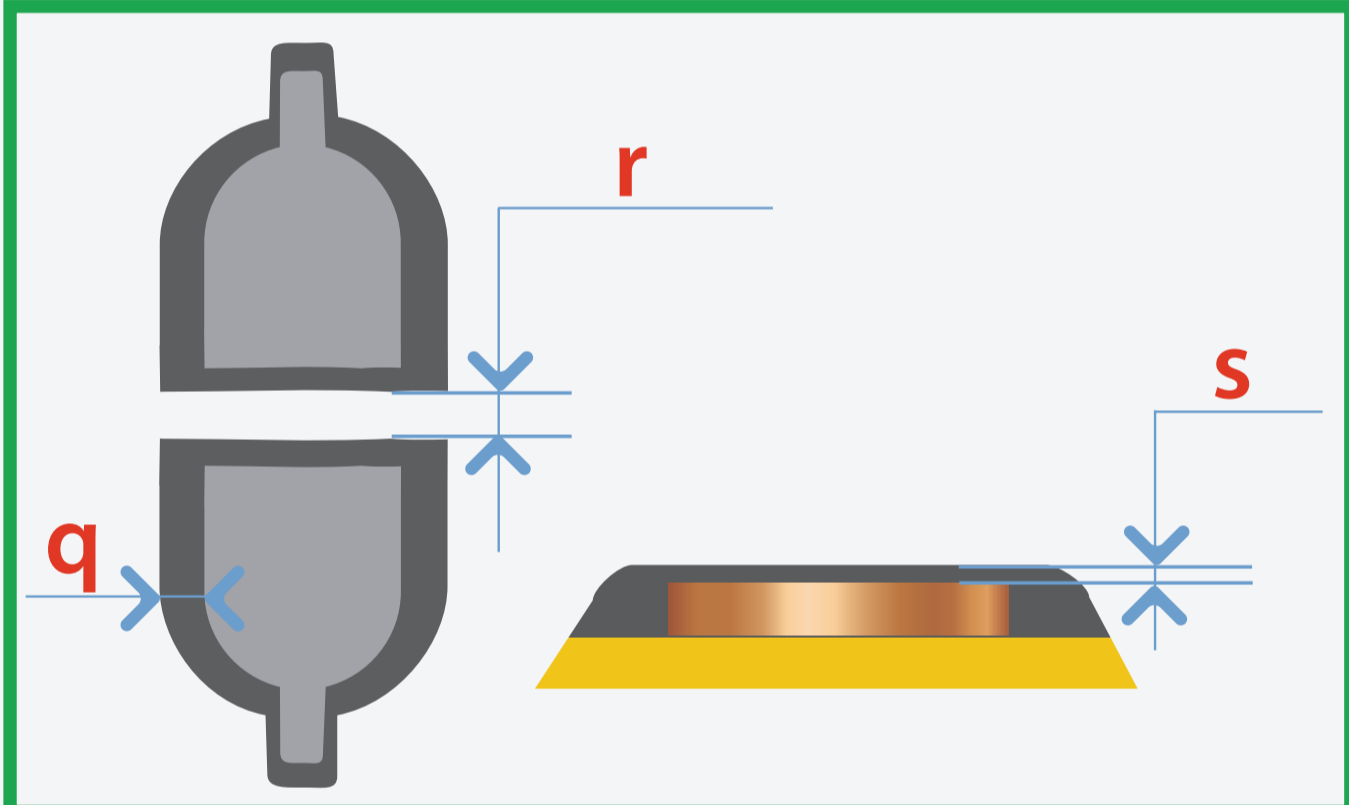
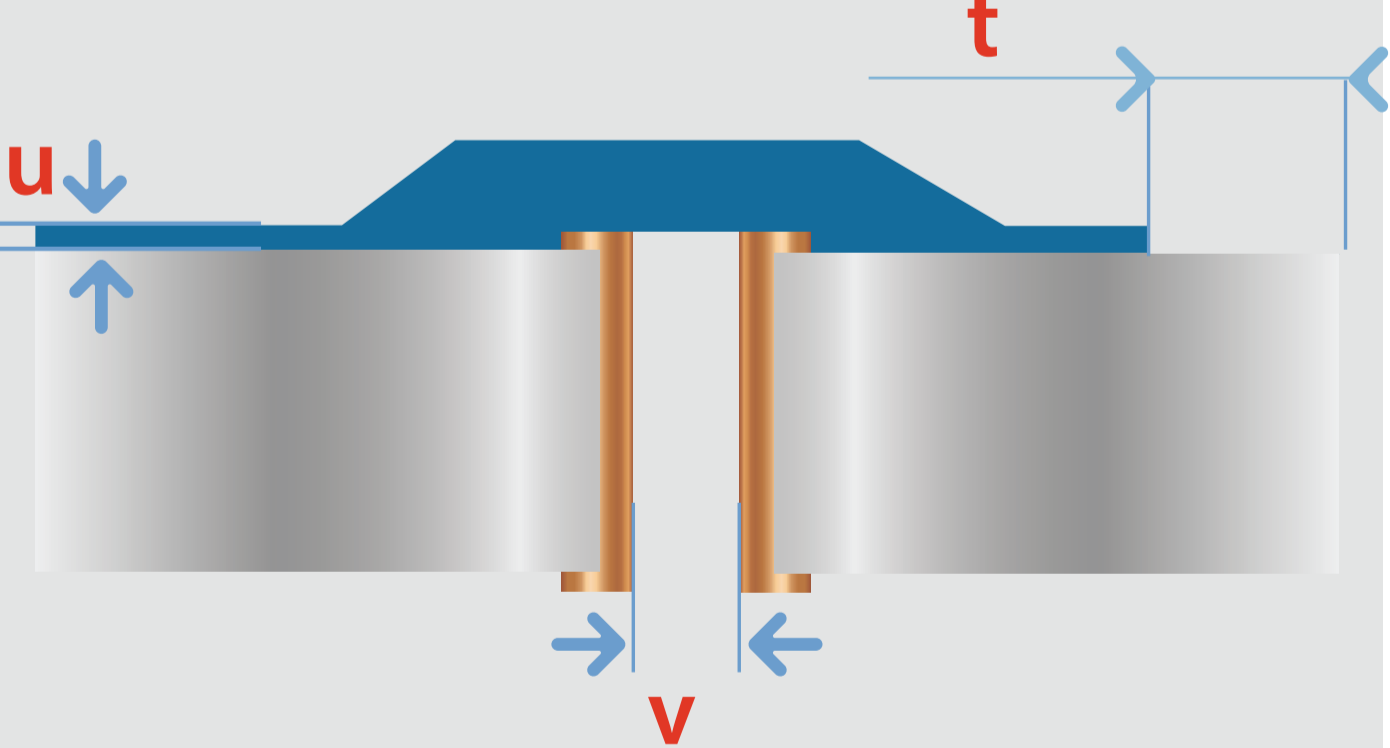
DOUBLE SIDED & MULTILAYER TECHNOLOGY

DOUBLE SIDED & MULTILAYER PCB				
ITEM DESIGN RULES	SYMBOL	DESCRIPTION	STANDARD	ADVANCED
BOARD THICKNESS	a			
				
<div>Minimum board thickness _____</div> <div>Maximum board thickness _____</div>			0.4 MM 3.2 MM	0.4 MM 5 MM
Minimum board thickness _____				
		4L 6L 8L+	0.5 MM 0.8 MM 1 MM	0.4 MM 0.7 MM 0.9 MM
Minimum core thickness _____			100 μm (without copper)	100 μm (copper included)
INNER LAYER	b			
Minimum copper thickness _____			1/3 OZ	1/3 OZ
Maximum copper thickness _____			6 OZ	6 OZ
NUMBER OF PCB LAYERS				
Maximum layer counts _____			30	64

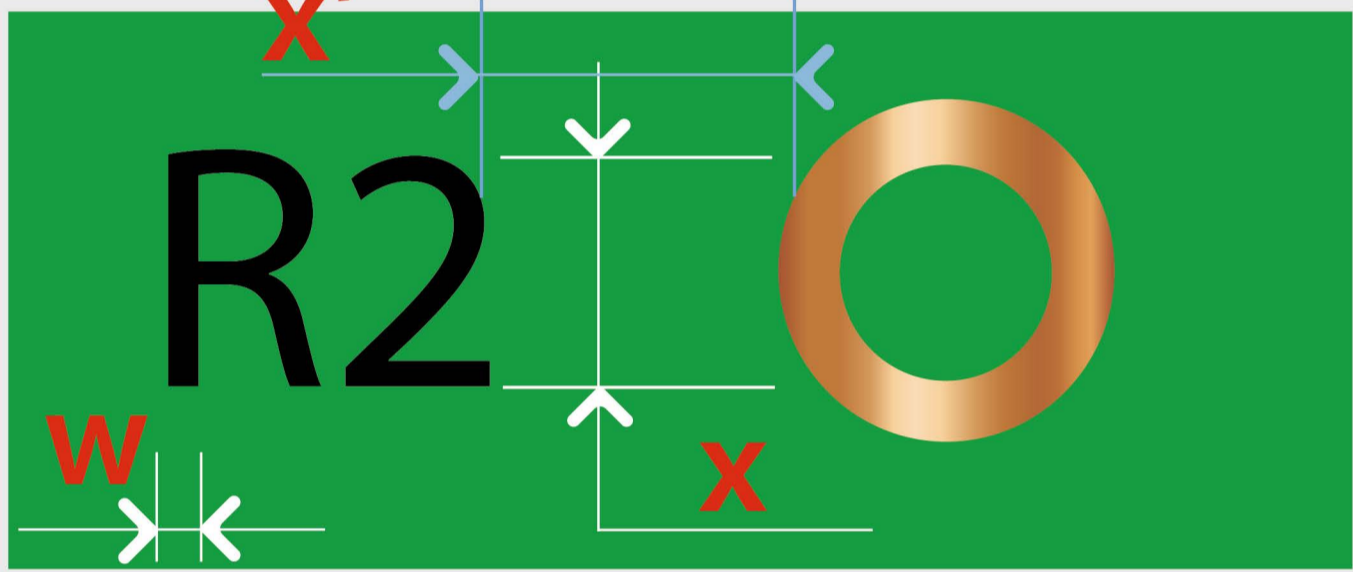
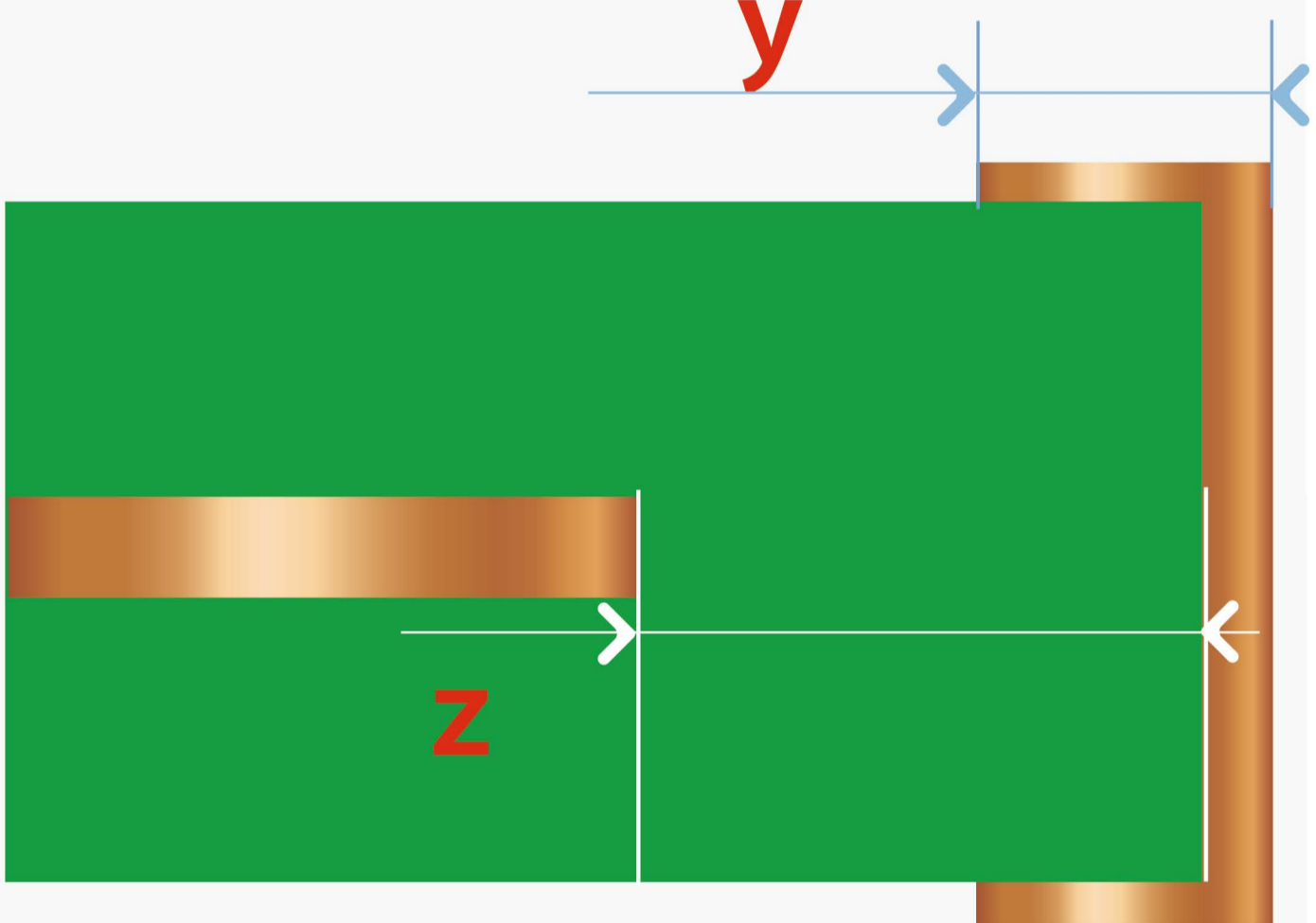
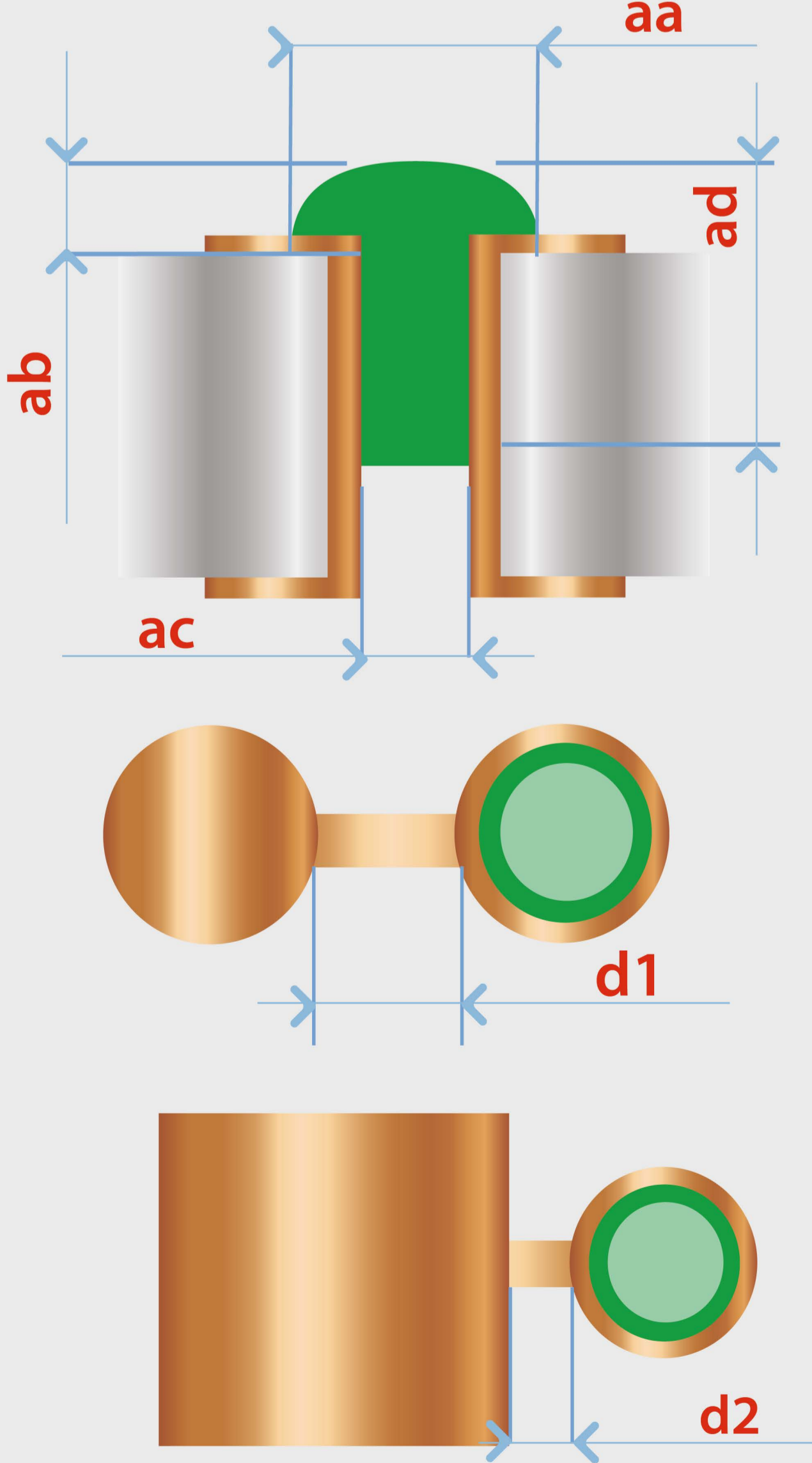
DOUBLE SIDED & MULTILAYER TECHNOLOGY

ITEM DESIGN RULES	SYMBOL	DESCRIPTION	STANDARD	ADVANCED
<p>PATTERN</p> <p>Minimum track width _____</p> 	d e f g	0.5 OZ 1 OZ 2 OZ 3 OZ 4 OZ 6 OZ	100 µm 110 µm 200 µm 250 µm 300 µm 400 µm	90 µm 100 µm 190 µm 240 µm 260 µm 350 µm
Space width (track to track) _____		_____	see value above	see value above
Track to pad distance _____		_____	see value above	see value above
Track to outline distance _____		_____	≥300 µm	≥250 µm
<p>DRILLING</p> <p>Minimum drilling hole size _____</p> <p>Pad diameters _____</p> <p>Finished hole tolerance _____</p> <p>NPTH hole _____</p> <p>Maximum aspect ratio _____</p>		_____ _____ _____ _____ _____	0.2 MM hole Ø+ 350 µm ±0.076 MM ±0.05 MM 8:1	0.15 MM hole Ø+ 200 µm ±0.05 MM ±0.05 MM 12:1
<p>SOLDER MASK</p> 	h i j k l m	_____ Solder Mask clearance	≥75 µm	≥50 µm
		_____ Between track & clearance	≥75 µm	≥50 µm
		_____ Solder Mask dam/web	≥75 µm	≥50 µm
		_____ Thickness on base material	≥10-25 µm	≥10-25 µm
		_____ Solder Mask thickness on copper	≥20-45 µm	≥20-45 µm
		_____ Solder Mask thickness on corner	≥7 µm	≥5 µm

DOUBLE SIDED & MULTILAYER TECHNOLOGY

ITEM DESIGN RULES	SYMBOL	DESCRIPTION	STANDARD	ADVANCED
<div>ROUTING</div> <div></div> <div>Outline tolerance _____</div> <div>Minimum diameter routing _____</div>	o/p n	_____ _____	±0.13 MM 0.8 MM	±0.1 MM 0.5 MM
<div>CARBON</div> <div></div> <div>Overlap carbon length _____</div> <div>Minimum carbon distance _____</div> <div>Carbon thickness _____</div>	q r s	_____ _____ _____	0.4 MM COPPER + 0.2 MM 7 µm	0.35 MM COPPER + 0.2 MM 10 µm
<div>PEELABLE MASK (BLUE MASK)</div> <div></div> <div>Minimum distance from outline _____</div> <div>Peelable (blue mask) min _____</div> <div>Hole coverage (max) _____</div>	t u v	_____ MIN MAX	0.8 MM 0.3 MM 2 MM	0.5 MM 0.3 MM 2.5 MM

DOUBLE SIDED & MULTILAYER TECHNOLOGY

ITEM DESIGN RULES	SYMBOL	DESCRIPTION	STANDARD	ADVANCED
<div>SILK SCREEN DESIGN</div> <div><div>Line width</div><div>Font heigth</div><div>Distance to solder mask opening</div></div> <div></div>	<div>W</div> <div>X</div> <div>X'</div>	<div></div> <div></div> <div></div>	<div>SILKSCREEN</div> <div>100 µm</div> <div>15 MM</div> <div>100 µm</div>	<div>DIRECT PRINTING</div> <div>75 µm</div> <div>1.0 MM</div> <div>80 µm</div>
<div>EDGE PLATING</div> <div></div>	<div>y</div> <div>z</div>	<div></div> <div>MINI</div>	<div>≥ 300 µm</div> <div>800 µm</div>	<div>≥ 250 µm</div> <div>600 µm</div>
<div>PLUGGING VIAS</div> <div></div>	<div>aa</div> <div>ab</div> <div>ac</div> <div>ad</div> <div>d1</div> <div>d2</div>	<div></div> <div></div> <div>MIN</div> <div>MAX</div> <div></div> <div></div>	<div>0.25 MM</div> <div>0.55 MM</div> <div>0.2 MM</div> <div>0.6 MM</div> <div>≤80% of total thickness</div> <div>100 µm</div> <div>254 µm</div>	<div>0.2 MM</div> <div>0.55 MM</div> <div>0.2 MM</div> <div>0.7 MM</div> <div>80%</div> <div>100 µm</div> <div>254 µm</div>