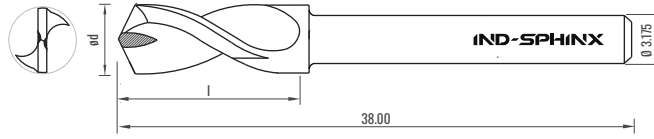


- FR4  
High Tg  
>170
- FR4  
Ceramic  
Fillers
- Ceramic  
Filled  
PTFE
- IMS  
PCB  
Ceramic  
Layer
- FR4  
Normal Tg



**APPLICATION**

Drilling of IMS PCBs and laminates with ceramic fillers

High Tg material > 170°C

Also Suitable for Drilling in

- Glass
- Quartz
- Green stage ceramics
- Al<sub>2</sub>O<sub>3</sub>, SiC, ZrO<sub>2</sub>, AlN

Ød DIAMETER	I FLUTE LENGTH	mm
3.20	12.00	
3.25	12.00	
3.30	12.00	
3.35 - 3.95	12.00	
4.00 - 4.95	12.00	
5.00 - 6.20	12.00	
6.25 - 6.50	12.00	

On request Inch / Special dimensions / Shank 3.00mm

**FEATURES & BENEFITS**

High feed drilling hence high productivity

Improved tool life ~ 5-20X

High dimensional accuracy

High Hardness ~ 10000 HV

RECOMMENDED PARAMETERS								
Ød mm	High Tg with Ceramic Fillers ( Tg ≥ 170° C )				IMS PCBs Aluminium			
	f µm/rev	N RPM	F m/min	B m/min	f µm/rev	N RPM	F m/min	B m/m
3.20 - 3.95	35	20000	0.7	15.0	40	25000	1.0	10.0
4.00 - 4.95	30	20000	0.6	15.0	32	25000	0.8	10.0
5.00 - 5.95	25	20000	0.5	15.0	24	25000	0.8	10.0
6.00 - 6.50	20	20000	0.4	15.0	20	25000	0.5	10.0
Ød Tool Diameter		f Chip Load		N Spindle Speed		F Infeed		B Retract Feed
Tabulated parameters provide guidelines which acts as starting points for optimising speeds and feeds at the user's end.								

**REMARKS**

- For laminate with ceramic dielectric, reduce RPM by 15% for IMS PCBs.
- For Copper IMS PCB reduce RPM by ~ 20% and feed rate by 25% from above IMS PCBs parameters.
- Recommended to use MQL with coolants like Ethanol or oil emulsion for improved performance and dimensional control.
- Control collet runout below 10 microns and vibration.
- Please visit our website for cutting parameter for other materials.

**PACKING**

25 tools per pack

50 tools per pack



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[customerfocus@indspinx.com](mailto:customerfocus@indspinx.com)