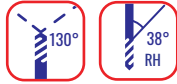
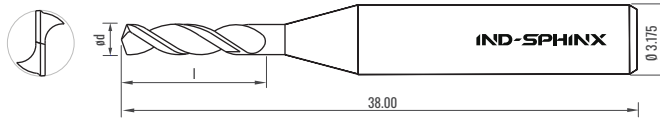


- FR4 High Tg >170
- FR4 Ceramic Fillers
- Ceramic Filled PTFE
- IMS PCB Ceramic Layer
- FR4 Normal Tg



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

Al₂O₃, SiC, ZrO₂, AlN

ød DIAMETER in steps of 0.05 mm	l FLUTE LENGTH mm
1.30 - 1.35	7.00
1.40 - 1.45	7.00
1.50 - 1.85	7.00
1.90 - 1.95	7.00
2.00 - 2.45	9.00
2.50 - 3.05	9.00
3.10 - 3.15	9.00
3.175	9.00

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	High Tg with Ceramic Fillers (Tg > 170° C)				IMS PCBs Aluminium			
	f	N	F	B	f	N	F	B
mm	µm/rev	RPM	m/min	m/min	µm/rev	RPM	m/min	m/min
1.30	39	46000	1.8	25.0	46	61000	2.8	10.0
1.35	41	44000	1.8	25.0	46	59000	2.7	10.0
1.40	43	43000	1.8	25.0	46	57000	2.6	10.0
1.45 - 1.60	46	39000	1.8	25.0	45	52000	2.3	10.0
1.65 - 1.80	51	34000	1.7	25.0	45	47000	2.1	10.0
1.85 - 2.00	56	31000	1.7	25.0	45	42000	2.0	10.0
2.05 - 2.30	60	28000	1.6	25.0	50	36000	1.8	10.0
2.35 - 2.60	60	24000	1.4	25.0	55	32000	1.8	10.0
2.65 - 2.90	60	22000	1.3	25.0	55	30000	1.6	10.0
2.95 - 3.15	60	20000	1.2	25.0	55	26000	1.4	10.0
3.175	35	20000	0.7	15.0	40	25000	1.0	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.

PACKING

10 tools per pack

50 tools per pack

- 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.



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