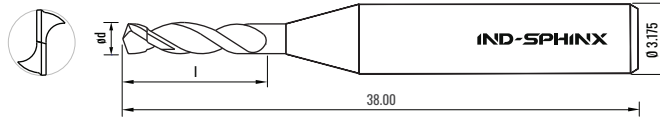


- FR4 High Tg >170
- FR4 Ceramic Fillers
- Ceramic Filled PTFE
- IMS PCB Ceramic Layer
- FR4 Normal Tg



Undercut



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	l FLUTE LENGTH		mm
0.50	5.00	7.00	
0.55	5.00	7.00	
0.60	5.00	7.00	
0.65	7.00	7.00	
0.70	7.00	-	
0.75	7.00	-	
0.80	7.00	-	
0.85	7.00	-	
0.90	7.00	-	
0.95	7.00	-	
1.00	7.00	-	
1.05	7.00	-	
1.10	7.00	-	
1.15	7.00	-	
1.20	7.00	-	
1.25	7.00	-	

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
0.50	15	120000	1.8	10.0	16	159000	2.6	8.0
0.55	16	110000	1.8	12.0	19	145000	2.7	9.0
0.60	18	100000	1.8	15.0	22	125000	2.8	10.0
0.65	20	93000	1.8	15.0	24	122000	2.9	10.0
0.70	21	86000	1.8	18.0	26	114000	3.0	10.0
0.75	22	80000	1.8	18.0	28	108000	3.0	10.0
0.80	24	75000	1.8	20.0	30	100000	3.0	10.0
0.85	26	71000	1.8	20.0	32	95000	3.0	10.0
0.90	27	67000	1.8	23.0	34	90000	3.1	10.0
0.95	29	63000	1.8	23.0	37	85000	3.1	10.0
1.00	30	60000	1.8	25.0	40	80000	3.2	10.0
1.05	32	57000	1.8	25.0	40	76000	3.0	10.0
1.10	33	55000	1.8	25.0	40	72000	2.9	10.0
1.15	35	52000	1.8	25.0	40	69000	2.8	10.0
1.20	36	50000	1.8	25.0	40	66000	2.6	10.0
1.25	37	48000	1.8	25.0	40	63000	2.6	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

10 tools per pack

50 tools per pack



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