

# Based Material Line Up

## mmWave G/ mmWave GB

### 1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk							Df						
mm	mil			14GHz	25GHz	37GHz	49GHz	61GHz	73 GHz	85 GHz	14GHz	25GHz	37GHz	49GHz	61GHz	73 GHz	85 GHz
0.102	4.0	1×1078	73	3.10	3.10	3.09	3.09	3.08	3.08	3.08	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
0.127	5.0	1×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
0.254	10	2×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
0.381	15	3×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
0.508	20	4×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
0.762	30	6×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
1.524	60	12×1078	78	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037

### 2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk							Df						
		mm	mil	14GHz	25GHz	37GHz	49GHz	61GHz	73 GHz	85 GHz	14GHz	25GHz	37GHz	49GHz	61GHz	73 GHz	85 GHz
1035	83	0.102	4.0	3.00	3.00	2.99	2.99	2.98	2.98	2.98	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
1078	68	0.081	3.2	3.17	3.17	3.16	3.16	3.15	3.15	3.15	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037
1078	78	0.127	5.0	3.05	3.05	3.04	3.04	3.03	3.03	3.03	0.0021	0.0024	0.0026	0.0028	0.0030	0.0034	0.0037

### 3. REMARK

- 1) Dk/Df test method(14GHz ~85GHz):Balance-type Circular-disk Resonator (BCDR).
- 2) The above data are intended for reference only. SYTECH reserves the right to make any update.