

Material Portfolio



| Class | IPC4101C | Definition | Main materials, usually on stock | Other materials, less used | Known equivalent materials |
|--------------------------------------|----------|--|--|---|--|
| Standard FR-4 | 21 | Dicy FR4(Tg130-140) | DE104 (Isola), IT140 (Iteq) | NP140(Nanya), S1141(Shengyi), VT42(Ventec),BK6160(Kingboard) | N4000-2 |
| Thermo stable low Tg (Lead-Free) | 101 | Filled Phenolic FR4 (Tg 130-140°C) | R1755C (Panasonic), DE104i (Isola) | IT588 (Iteq), TU668 (TUC) | |
| Thermo stable mid Tg (Lead- Free) | 99 | Filled Phenolic FR4 (Tg 150-160°C) | IS400 (Isola) ,IT158 (Iteq), R1755M (Panasonic) | S1000(Shengyi), NP155F(Nanya), VT-481 (Ventec) | |
| Thermo stable HiTg (Lead- Free) | 126 | Filled Phenolic FR4 (Tg 170-180°C) | PCL370HR (Isola), IT180A (Iteq) | R1755V (Panasonic), N4000-29 (Nelco),TU768 (Tuc) | |
| H.F. | 127 | Hologen Free-mid Tg FR-4 | R1566W (Panasonic) | IS 156 (Isola) | IT140G,TU862HF |
| PY | 42 | Polyimide | N7000-1 (Nelco) | VT-901 (Ventec) | |
| Mid Dk/ Mid Df | | Dk: 3.7~4.0 (@1GHz) Df: 0.007~0.013 (@1GHz) | FR-408 (Isola), N4000-13 (Nelco) | IS 415 and FR-408HR (Isola); Megtron4 (Panasonic); Getek; IT200D(Iteq); N4800-20 (Nelco) | |
| Low Dk Low Df | | Dk < 3.7 (@1GHz) Df < 0.007 (@1GHz) | RO4350B (Rogers), IS620i (Isola), AR25FR (Arlon) | N6800-22SI(Nelco); Megtron6 (Panasonic) | |
| RF | | Df < 0.005 (@1GHz) | AR25N(Arlon); RO4003(Rogers) | RF35(Taconic); IS680(Isola); N9000 (Nelco) | Duroid series, RO 3000 series,TLX series |