

Long-Term High-Temperature Resistant FPC

Excellent in long-term heat resisting properties under high-temperature environment with adhesive-less structure!

Electric characteristics are not damaged even after a long-term high-temperature test of 1,000 hours or the equivalent at 200°C.

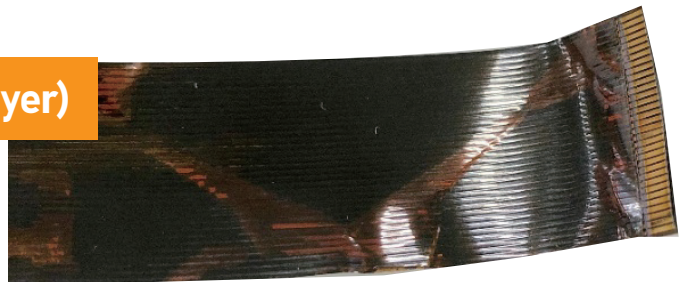
Test method

Wind products round a pin gage of 6.4 mm in diameter to check the status after the products are left as they are at a high temperature of 200°C for 1,000 hours or the equivalent.

All LCPs (without adhesive)



Polyimide FPC (with adhesive layer)



Evaluation result

| All LCPs (without adhesive) | | | | |
|-----------------------------------|-----------------------------|-----------------------------|-----------------------------------------------------|------------------------|
| Test item | Before test | After test | Acceptability criterion | Test method |
| Insulation resistance | $9.3 \times 10^{11} \Omega$ | $5.4 \times 10^{11} \Omega$ | $5.0 \times 10^8 \Omega$ or more | JIS C 5016 section 7.6 |
| Conduction resistance change rate | 0% | 3.60% | Change rate of within 10% | JIS C 5016 section 9.2 |
| Withstand voltage | - | 500V | No flashover must occur at 500 VAC applied voltage. | JIS C 5016 section 7.5 |
| Coverlay peeling | No peeling | No peeling | No peeling must occur. | - |

| Polyimide FPC (with adhesive layer) | | | | |
|-------------------------------------|-----------------------------|---------------------|-----------------------------------------------------|------------------------|
| Test item | Before test | After test | Acceptability criterion | Test method |
| Insulation resistance | $2.1 \times 10^{11} \Omega$ | Cannot be measured. | $5.0 \times 10^8 \Omega$ 以上 | JIS C 5016 section 7.6 |
| Conduction resistance change rate | 0% | 12.70% | Change rate of within 10% | JIS C 5016 section 9.2 |
| Withstand voltage | - | 300V | No flashover must occur at 500 VAC applied voltage. | JIS C 5016 section 7.5 |
| Coverlay peeling | No peeling | Peeled off | No peeling must occur. | - |



YAMASHITA MATERIALS