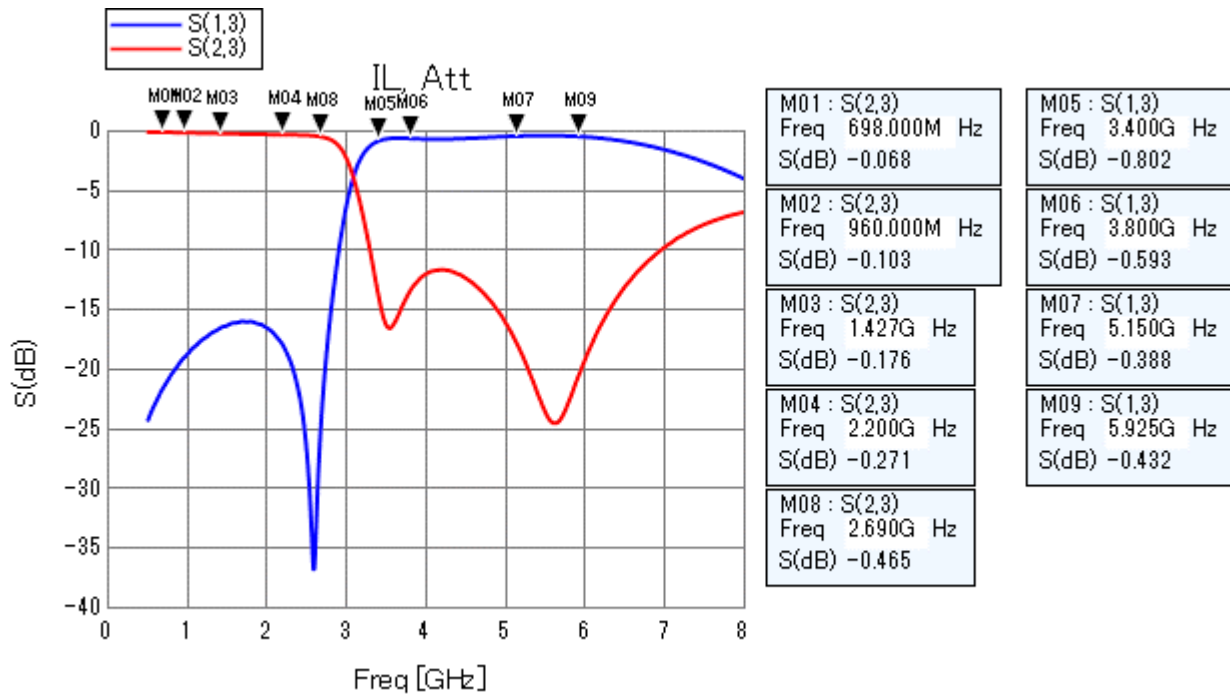


# Chip Multilayer Diplexer

## 1. Characteristics ( at -40~+85°C)

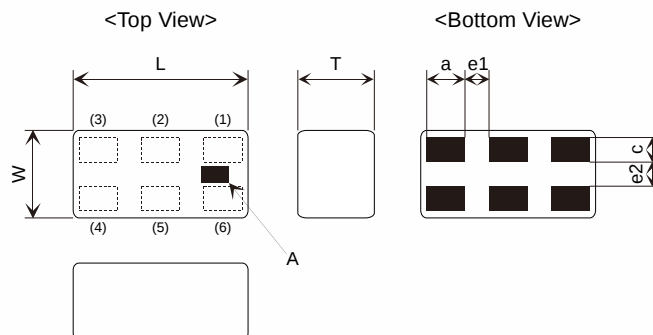
|                       |       |       |                                              |
|-----------------------|-------|-------|----------------------------------------------|
| Tentative Part Number |       |       | LFD182G50MPAE246                             |
| Pass Band Range       | f1    |       | 698.00 ~ 960.00 MHz                          |
|                       | f2    |       | 1427.00 ~ 2200.00 MHz                        |
|                       | f3    |       | 2300.00 ~ 2690.00 MHz                        |
|                       | f4    |       | 3400.00 ~ 3800.00 MHz                        |
|                       | f5    |       | 5150.00 ~ 5925.00 MHz                        |
| Insertion Loss (dB)   | P2-P3 | in f1 | 0.25 max. at 25°C<br>0.40 max. at -40~ +85°C |
|                       |       | in f2 | 0.40 max. at 25°C<br>0.55 max. at -40~ +85°C |
|                       |       | in f3 | 0.85 max. at 25°C<br>1.00 max. at -40~ +85°C |
|                       | P1-P3 | in f4 | 1.00 max. at 25°C<br>1.15 max. at -40~ +85°C |
|                       |       | in f5 | 0.70 max. at 25°C<br>0.85 max. at -40~ +85°C |
| Attenuation (dB)      | P2-P3 | in f4 | 11.0 min.                                    |
|                       |       | in f5 | 13.0 min.                                    |
|                       | P1-P3 | in f1 | 14.0 min.                                    |
|                       |       | in f2 | 11.0 min.                                    |
|                       |       | in f3 | 13.0 min.                                    |
| VSWR                  | P2    | in f1 | 1.25 max.                                    |
|                       |       | in f2 | 1.67 max.                                    |
|                       |       | in f3 | 1.92 max.                                    |
|                       | P1    | in f4 | 1.78 max.                                    |
|                       |       | in f5 | 2.10 max.                                    |
|                       | P3    | in f1 | 1.25 max.                                    |
|                       |       | in f2 | 1.67 max.                                    |
|                       |       | in f3 | 1.92 max.                                    |
|                       |       | in f4 | 1.78 max.                                    |
|                       |       | in f5 | 2.10 max.                                    |
| Isolation (dB)        | P1-P2 | in f1 | 14.0 min.                                    |
|                       |       | in f2 | 11.0 min.                                    |
|                       |       | in f3 | 13.0 min.                                    |
|                       |       | in f4 | 11.0 min.                                    |
|                       |       | in f5 | 13.0 min.                                    |
| Power Capacity        |       |       | 2.0 W max                                    |

All the technical data and information contained herein are subject to change without prior notice.



## 2. Construction, Dimensions & Marking

## 3. Land Pattern



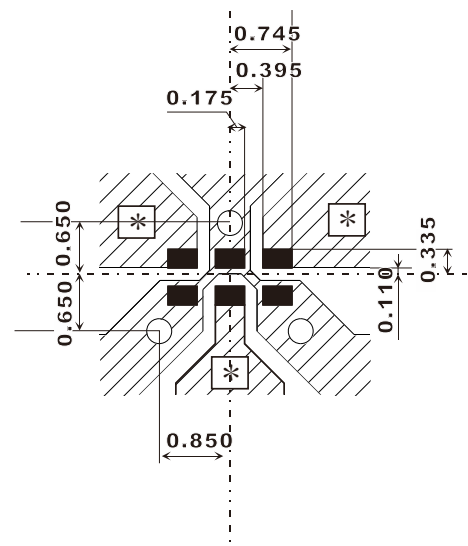
| Mark | Meaning                |
|------|------------------------|
| A    | Directional Input Mark |

(in mm)

| Mark | Dimension | Mark | Dimension     | Mark | Dimension   |
|------|-----------|------|---------------|------|-------------|
| L    | 1.6 ± 0.1 | a    | 0.35 ± 0.05   | e1   | 0.22 ± 0.05 |
| W    | 0.8 ± 0.1 | c    | 0.225 ± 0.025 | e2   | 0.22 ± 0.05 |
| T    | 0.65 max. | -    | -             | -    | -           |

### TERMINAL CONFIGURATION

| Terminal No. | Terminal Name | Terminal No. | Terminal Name  |
|--------------|---------------|--------------|----------------|
| (1)          | GND           | (4)          | High-Band (P1) |
| (2)          | Common (P3)   | (5)          | GND            |
| (3)          | GND           | (6)          | Low-Band (P2)  |



(in mm)

- Land
- Solder resist
- No pattern
- Solder resist
- Through Hole Φ 0.30

\*Line width to be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

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- Undersea equipment.
- Medical equipment.
- Traffic signal equipment.
- Burning / explosion control equipment
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.
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