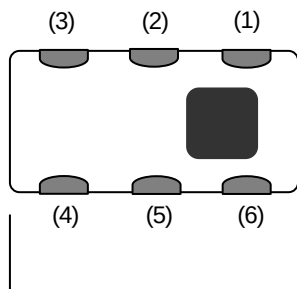


## 1608 TYPE MULTILAYER DIPLEXER

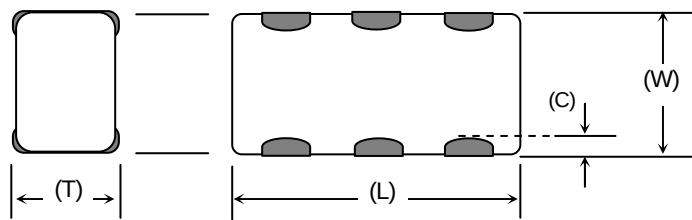
P/N: **DPX165900DT-8125A1**

### MECHANICAL DIMENSIONS

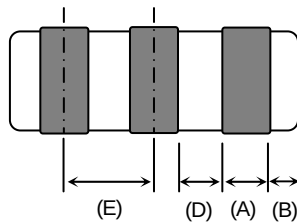
[Top View]



[Bottom View]



[Side View]



Dimension (mm)

| (L)             | (W)             | (T)             | (A)             | (B)             | (C)             | (D)             | (E)             |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1.60<br>+/-0.15 | 0.80<br>+/-0.15 | 0.60<br>+/-0.10 | 0.30<br>+/-0.10 | 0.10<br>+/-0.10 | 0.15<br>+/-0.10 | 0.25<br>+/-0.10 | 0.55<br>+/-0.10 |

PIN Configuration

| (1)      | (2) | (3)       | (4) | (5)    | (6) |
|----------|-----|-----------|-----|--------|-----|
| Low-Band | GND | High-Band | GND | Common | GND |

### TEMPERATURE RANGE

|                       |              |
|-----------------------|--------------|
| Storage Temperature   | -40 ~ +85 °C |
| Operating Temperature | -40 ~ +85 °C |

## ELECTRICAL CHARACTERISTICS (Ta= +25 ± 5 °C)

### Low-Band

| Parameter      | Freq. (MHz) | Specification | Typ. | Unit |
|----------------|-------------|---------------|------|------|
| Insertion Loss | 2400-2500   | 0.6 max.      | 0.38 | dB   |
| Attenuation    | 4800-5000   | 18 min.       | 24.1 | dB   |
|                | 7200-7500   | 18 min.       | 24.4 | dB   |

### High-Band

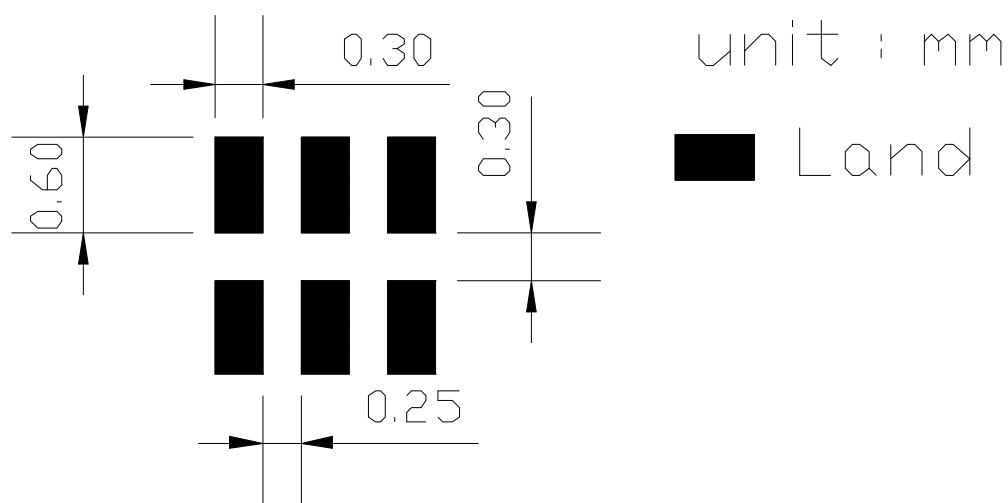
| Parameter      | Freq. (MHz) | Specification | Typ. | Unit |
|----------------|-------------|---------------|------|------|
| Insertion Loss | 5100-5900   | 1.4 max       | 0.82 | dB   |
| Attenuation    | 1800-2500   | 20 min.       | 31.1 | dB   |
|                | 3700-3900   | 20 min.       | 32.5 | dB   |
|                | 9800-11900  | 10 min.       | 30.1 | dB   |

### Common

| Parameter | Freq. (MHz) | Specification | Typ. | Unit |
|-----------|-------------|---------------|------|------|
| VSWR      | 2400-2500   | 2.0 max.      | 1.18 | -    |
|           | 5100-5900   | 2.3 max.      | 1.57 | -    |

We recommend to terminate for all port with 50ohm at all times.

## RECOMMENDED LAND PATTERN



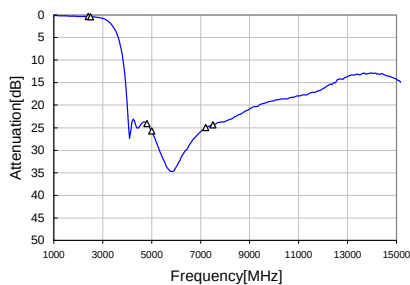
Note: All specifications are subject to change and are not guaranteed.

# FREQUENCY CHARACTERISTICS

DPX165900DT-8125A1 Sample Data

Low band-Port

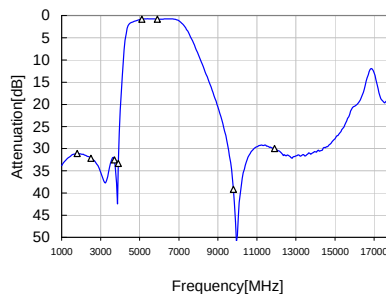
S21



| Insertion Loss |          |
|----------------|----------|
| 2400 MHz       | 0.35 dB  |
| 2500 MHz       | 0.38 dB  |
| Attenuation    |          |
| 4800 MHz       | 24.10 dB |
| 5000 MHz       | 25.74 dB |
| 7200 MHz       | 24.97 dB |
| 7500 MHz       | 24.38 dB |

High band-Port

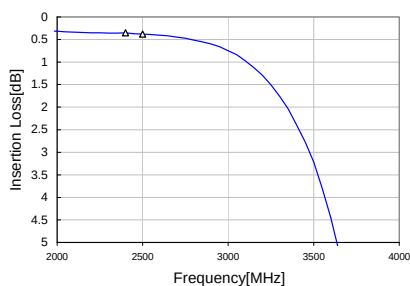
S31



| Insertion Loss |          |
|----------------|----------|
| 5100 MHz       | 0.82 dB  |
| 5900 MHz       | 0.80 dB  |
| Attenuation    |          |
| 1800 MHz       | 31.09 dB |
| 2500 MHz       | 32.14 dB |
| 3700 MHz       | 32.53 dB |
| 3900 MHz       | 33.34 dB |
| 9800 MHz       | 39.13 dB |
| 11900 MHz      | 30.01 dB |

Low band-Port

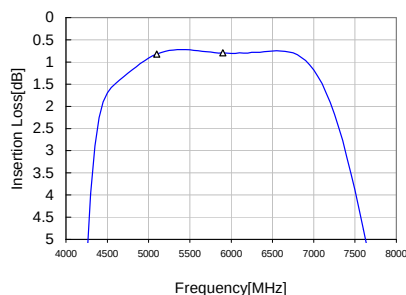
S21



| Insertion Loss |         |
|----------------|---------|
| 2400 MHz       | 0.35 dB |
| 2500 MHz       | 0.38 dB |

High band-Port

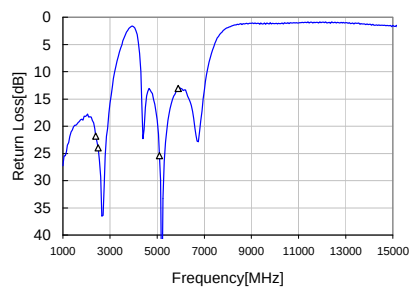
S31



| Insertion Loss |         |
|----------------|---------|
| 5100 MHz       | 0.82 dB |
| 5900 MHz       | 0.80 dB |

Common Port Return Loss

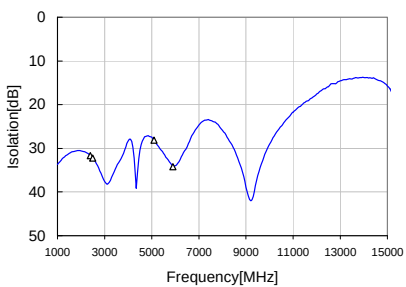
S11



|          |          |
|----------|----------|
| 2400 MHz | 21.86 dB |
| 2500 MHz | 23.94 dB |
| 5100 MHz |          |
| 5900 MHz | 13.09 dB |

Isolation

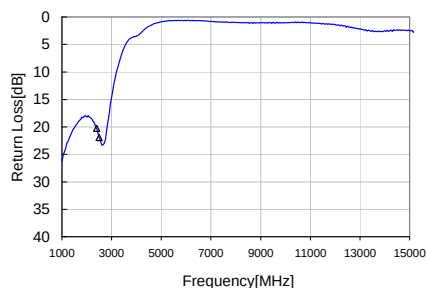
S23



|          |         |
|----------|---------|
| 2400 MHz | 31.7 dB |
| 2500 MHz | 32.3 dB |
| 5100 MHz | 28.1 dB |
| 5900 MHz | 34.2 dB |

Low band-Port Return Loss

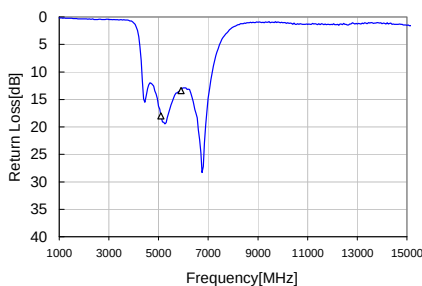
S22



|          |          |
|----------|----------|
| 2400 MHz | 20.26 dB |
| 2500 MHz | 21.97 dB |

High band-Port Return Loss

S33



|          |          |
|----------|----------|
| 5100 MHz | 18.01 dB |
| 5900 MHz | 13.41 dB |

Note: All specifications are subject to change and are not guaranteed.

# AMEYA360

## Components Supply Platform

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