muRata

DIRECTIONAL COUPLER

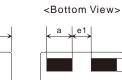
1. Characteristics (at -40 ~ +85 °C)

| Part Number | | LDJ0Q2G4520CL009 | | |
|---------------------------|----|---|--|--|
| Frequency Range (BW) | f1 | 2450.00 ± 50.00 MHz | | |
| | f2 | 5375.00 ± 475.00 MHz | | |
| Coupling | f1 | 21.25 \pm 1.25 dB (Termination : 50 Ω) | | |
| | f2 | 14.5±1.8 dB (Termination : 50 Ω) | | |
| Insertion Loss in BW | f1 | 0.30 dB max. at 25°C 0.33 dB max. at -40 ~ + 85 °C | | |
| | f2 | 0.45 dB max. at 25°C 0.48 dB max. at -40 ~ + 85 °C | | |
| Directivity in BW | f1 | 13.0 dB min. | | |
| | f2 | 14.0 dB min. | | |
| V.S.W.R. in BW | f1 | 1.30 max. | | |
| (IN port / Coupled port) | f2 | 1.80 max. | | |
| Characteristics Impedance | | 50 Ω (Nominal) | | |
| Power Capacity | | 3W max. (50 Ω Load) | | |

2. Construction, Dimensions & Marking

Т

<Top View>





| Mark | Meaning |
|------|------------------|
| Α | Directional Mark |

| (in | mm) |
|-----|-----|
| γuu | mm, |

C

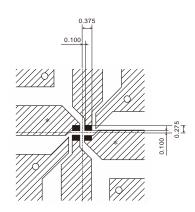
e2

| Mark | Dimension | Mark | Dimension |
|------|-------------------|------|-------------------|
| L | 0.65 ± 0.05 | с | 0.100 ± 0.060 |
| W | 0.50 ± 0.05 | e1 | 0.20 ± 0.05 |
| Т | 0.30 max. | e2 | 0.20 ± 0.05 |
| a | 0.175 ± 0.050 | - | - |

TERMINAL CONFIGURATION

| Terminal No. | Terminal Name | Terminal No. | Terminal Name |
|--------------|---------------|--------------|------------------|
| (1) | Main OUT | (3) | Coupled Out |
| (2) | IN | (4) | Terminate |

3. Land Pattern



| | Land |
|------------|-----------------------------|
| \square | Solder resist |
| | No pattern Solder resist |
| \bigcirc | Through Hole ϕ 0.30 |

(in mm)

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

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- Power plant control equipment
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- Application of similar complexity and/ or reliability requirements to the applications listed in the above.

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