

# L5206F

EK0506-0006 Ver.B



## PIN Diode

### ■ FEATURES

- Low series resistance
- Low insertion loss
- Low capacitance
- High isolation
- RoHS compliant
- Lead free/ Halogen free



Size : 1.7mm x 0.9mm x 0.5mm

### ■ MECHANICAL DATA

- Case : SOD-523F (0603C) standard package molded plastic.
- Terminals : MatteTin plated, solderable per MIL-STD-750, method 2026.
- Polarity : Indicated by cathode band.

### ■ DESCRIPTION

- The L5206F is designed for WLAN, WiMAX, measuring instruments and other RF switching applications.

### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| SYMBOL        | PARAMETER                 | RATING     | UNITS |
|---------------|---------------------------|------------|-------|
| <b>VR</b>     | Reverse Voltage           | 180        | V     |
| <b>PD [1]</b> | Power Dissipation         | 300        | mW    |
| <b>Tj</b>     | Junction Temperature      | 150        | °C    |
| <b>Tstg</b>   | Storage Temperature Range | -55 to 150 | °C    |

[1] Mounting on glass epoxy PCB (50mm x 50mm x 1.6mm)

### ■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

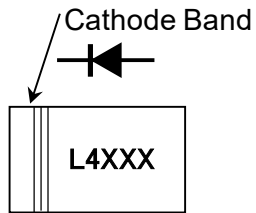
| SYMBOL         | PARAMETER                 | CONDITIONS                   | LIMITS |       |      | UNITS      |
|----------------|---------------------------|------------------------------|--------|-------|------|------------|
|                |                           |                              | MIN    | TYP   | MAX  |            |
| <b>IR</b>      | Reverse Current           | <b>VR</b> = 180V             | -      | -     | 10   | $\mu$ A    |
| <b>VF</b>      | Forward Voltage           | <b>IF</b> = 50mA             | -      | -     | 1.0  | V          |
| <b>Rfs</b>     | Forward Series Resistance | <b>IF</b> = 50mA, f = 100MHz | -      | 1.0   | 1.5  | $\Omega$   |
| <b>CT</b>      | Diode Capacitance         | <b>VR</b> = 40V, f = 100MHz  | -      | 0.15  | 0.22 | pF         |
| <b>Rp</b>      | Parallel Resistance       | <b>VR</b> = 0V, f = 100MHz   | 5.0    | 10.0  | -    | k $\Omega$ |
| <b>IL [2]</b>  | Insertion Loss            | <b>IF</b> = 30mA, f = 3GHz   | -      | -0.18 | -    | dB         |
| <b>ISO [2]</b> | Isolation                 | <b>VR</b> = -20V, f = 3GHz   | -      | -10   | -    | dB         |

[2] Series configuration. Zo=50 $\Omega$ . Losses of test fixtures are excluded from the measuring data.

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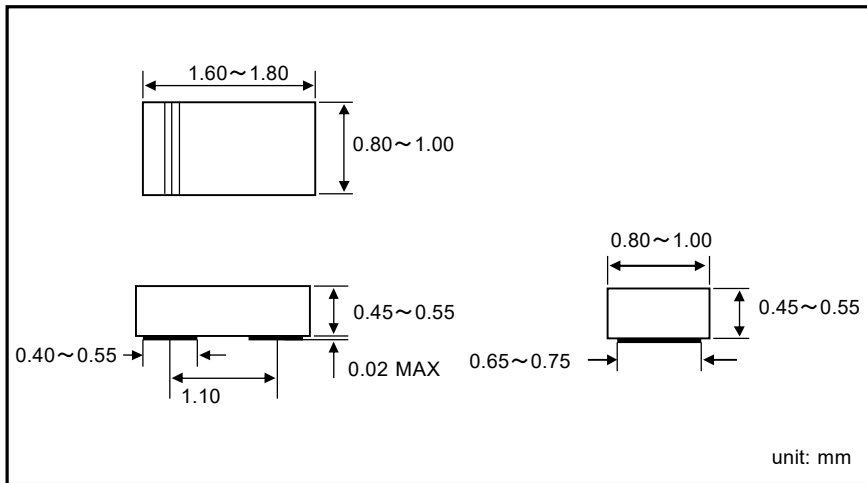
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## MARKING INFORMATION

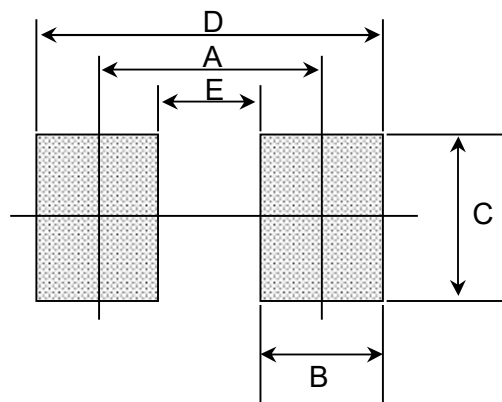


L4 : Part number L5206F  
XXX : Lot code (3~4digits)

## PACKAGE OUTLINE INFORMATION



## SUGGESTED PAD LAYOUT

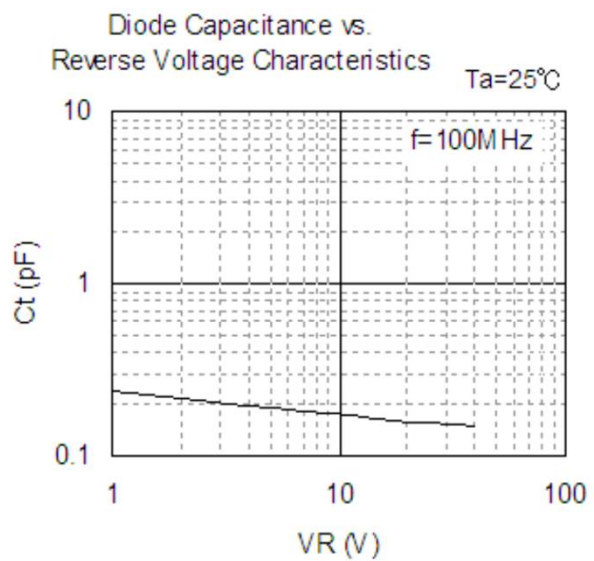
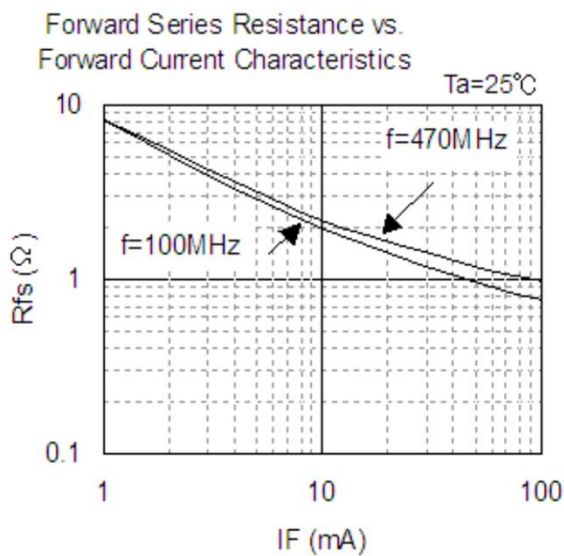
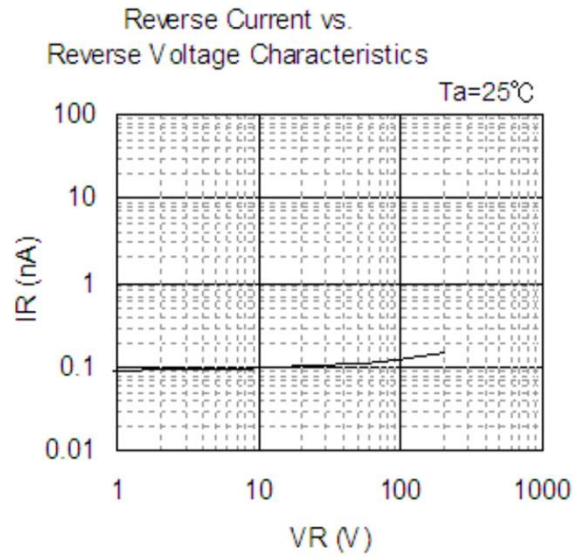
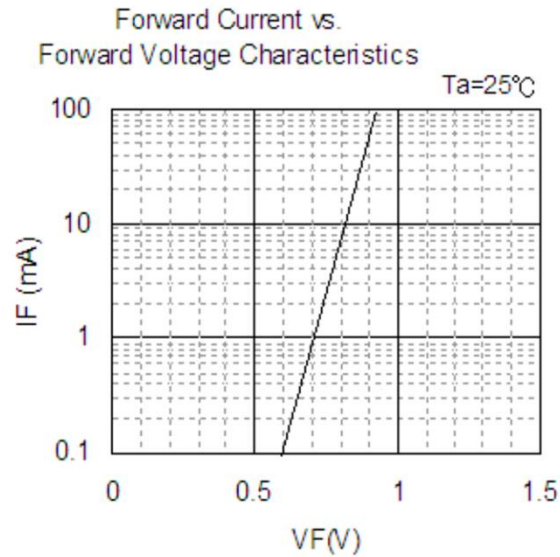


| Size | SOD-523F<br>(0603C) |
|------|---------------------|
| A    | 1.1                 |
| B    | 0.6                 |
| C    | 0.8                 |
| D    | 1.7                 |
| E    | 0.5                 |
| unit | mm                  |

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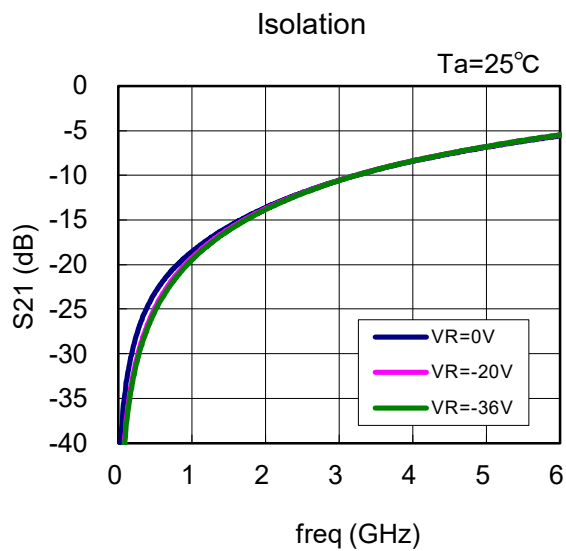
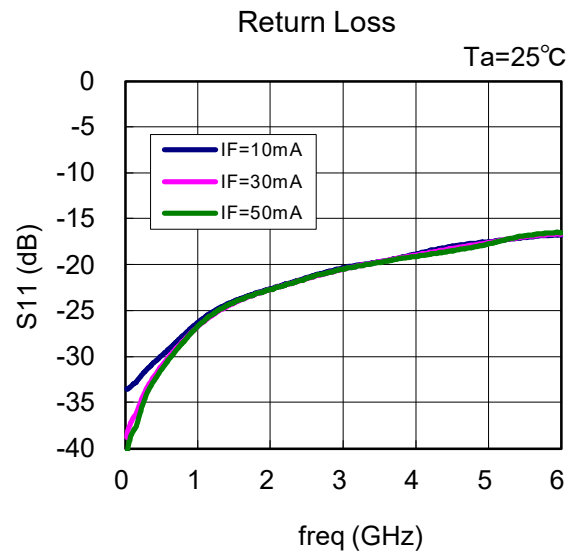
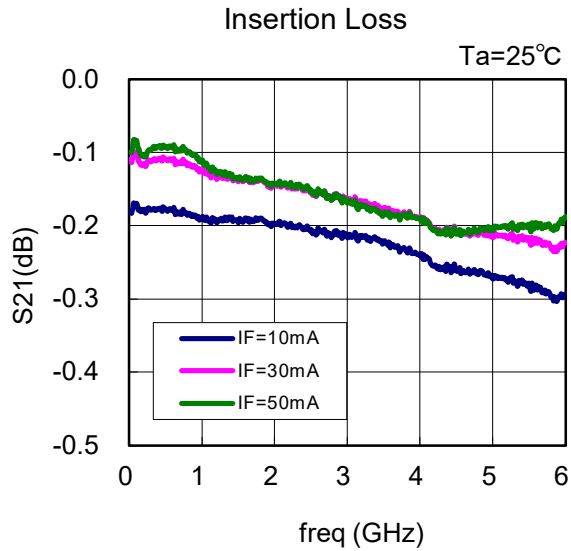
## ■ TYPICAL PERFORMANCE CHARACTERISTICS 1



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## ■ TYPICAL PERFORMANCE CHARACTERISTICS 2



\*) Series configuration.  $Z_0=50\ \Omega$ .  
Losses of test fixtures are excluded from the measuring data.

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