



April. 2016 Ver.1.2
TDK Corporation

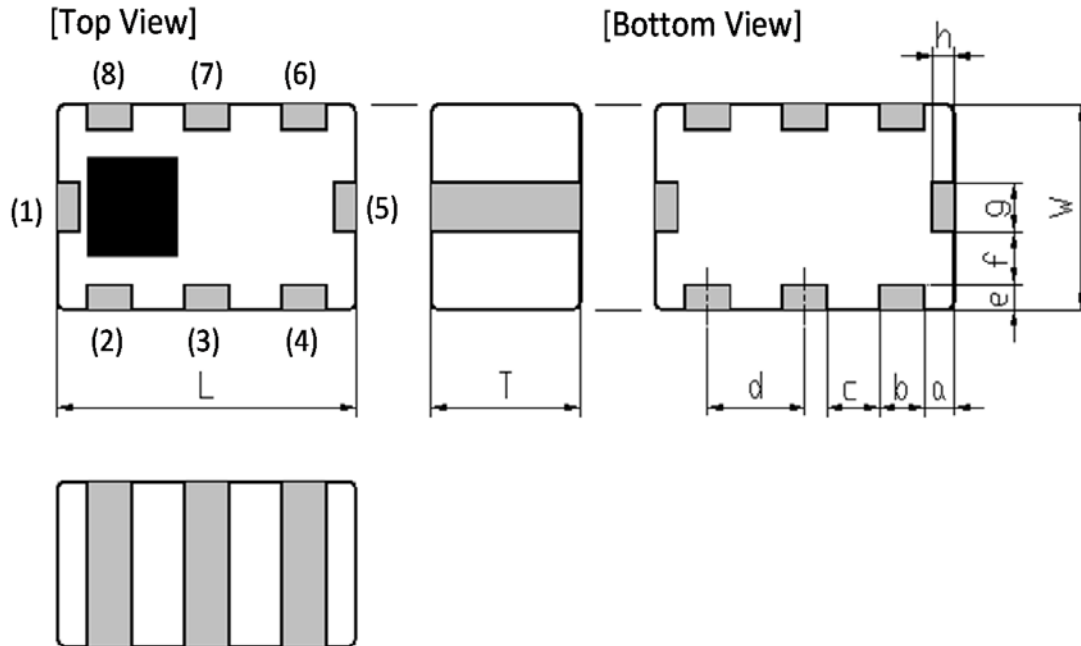
Multilayer Band Pass Filter (Balance output type)

For 2.4GHz W-LAN & Bluetooth

DEA Series

2012 TYPE

P/N: **DEA202450BT-7227A1-H**

DEA202450BT-7227A1-H**SHAPES AND DIMENSIONS**

Dimensions (mm)

| L | W | T | a | b | c | d | e | g | h |
|---------|---------|------|---------|---------|---------|---------|---------|---------|---------|
| 2.00 | 1.25 | 1.00 | 0.20 | 0.30 | 0.35 | 0.65 | 0.25 | 0.30 | 0.25 |
| +/-0.15 | +/-0.15 | Max | +/-0.20 | +/-0.20 | +/-0.15 | +/-0.15 | +/-0.20 | +/-0.20 | +/-0.20 |

Terminal functions

| | |
|-----|-----------------|
| (1) | Unbalanced Port |
| (2) | GND |
| (3) | GND |
| (4) | Balanced Port |
| (5) | DC feed or N.C. |

| | |
|-----|---------------|
| (6) | Balanced Port |
| (7) | GND |
| (8) | GND |

TEMPERATURE RANGE

| Operating temperature | Storage temperature |
|-----------------------|---------------------|
| -40 to +85 °C | -40 to +85 °C |

TERMINATION FINISH

| Material |
|----------|
| Sn plate |

DEA202450BT-7227A1-H

■ ELECTRICAL CHARACTERISTICS

(Measurement)

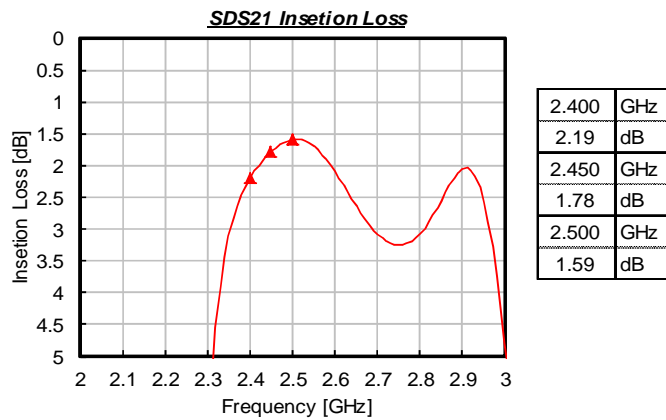
| Parameter | Frequency (MHz) | TDK Spec | | |
|---|-----------------|--------------|------|------|
| | | Min. | Typ. | Max. |
| Unbalanced Port Characteristic Impedance (ohm) | 2400~2500 | 50 (Nominal) | | |
| Balanced Port Characteristic Impedance (ohm) | 2400~2500 | 50 (Nominal) | | |
| Insertion Loss (dB) | 2400 to 2500 | - | 2.19 | 2.7 |
| | to | - | | |
| | to | - | | |
| Attenuation (dB) | 824 to 960 | 45 | 48.4 | - |
| | 1710 to 1990 | 38 | 41.8 | - |
| | 1850 | 38 | 42.1 | - |
| | 2110 to 2170 | 25 | 42.2 | - |
| | 4800 to 5000 | 40 | 59.6 | - |
| | 7200 to 7500 | 40 | 53.0 | - |
| Return Loss at Unbalanced Port (dB) | 2400 to 2500 | 9 | 16.0 | - |
| Return Loss at Balanced Port (dB) | 2400 to 2500 | 9 | 19.1 | - |
| Phase Balance (deg.) | 2400 to 2500 | 160 | 167 | 180 |
| Amplitude Balance (dB) | 2400 to 2500 | -1 | 0.39 | 3 |
| Power Handling (W) | | - | | 0.5 |

Ta = +25+/-5°C

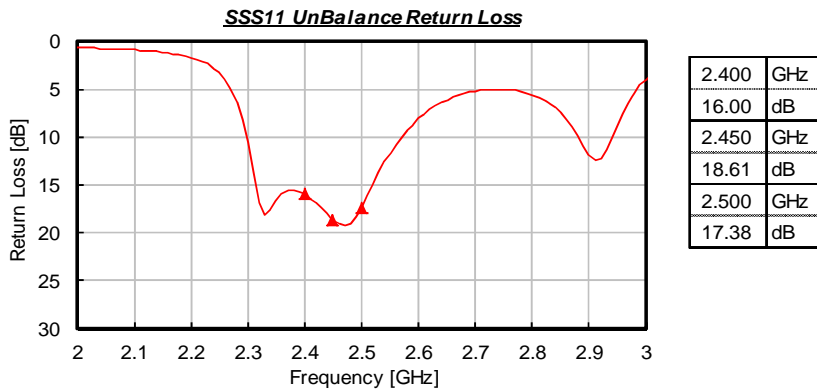
DEA202450BT-7227A1-H

FREQUENCY CHARACTERISTICS

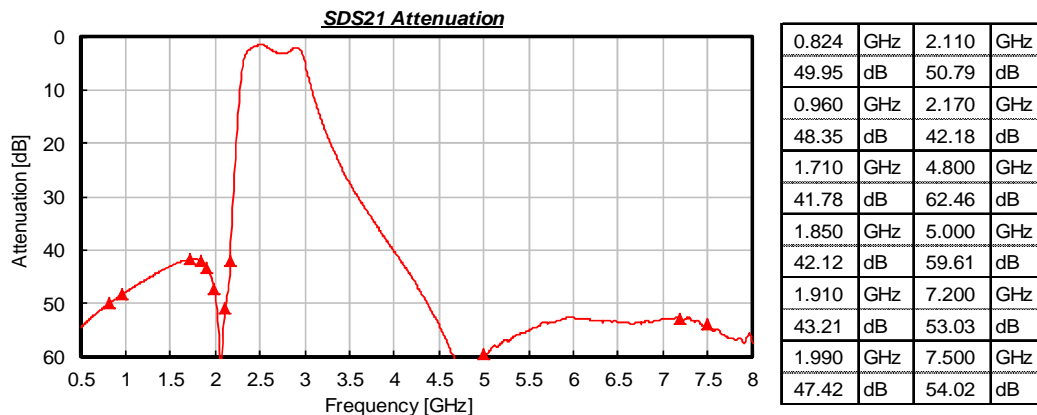
Insertion Loss



Unbalance Return Loss



Attenuation



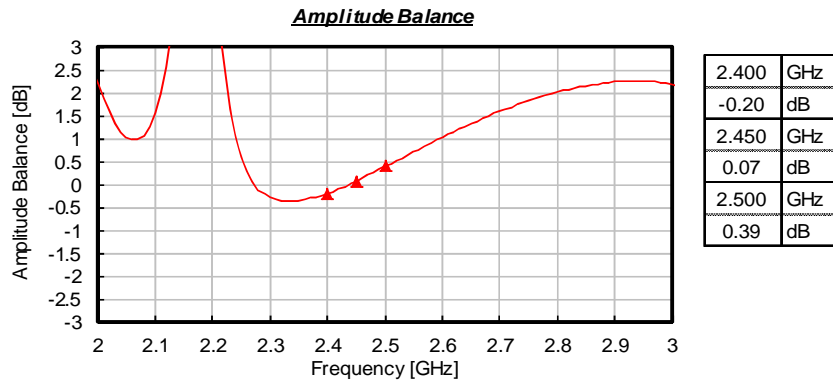
All specifications are subject to change without notice.

TDK Technology - Proprietary and Confidential Information of TDK Group Companies

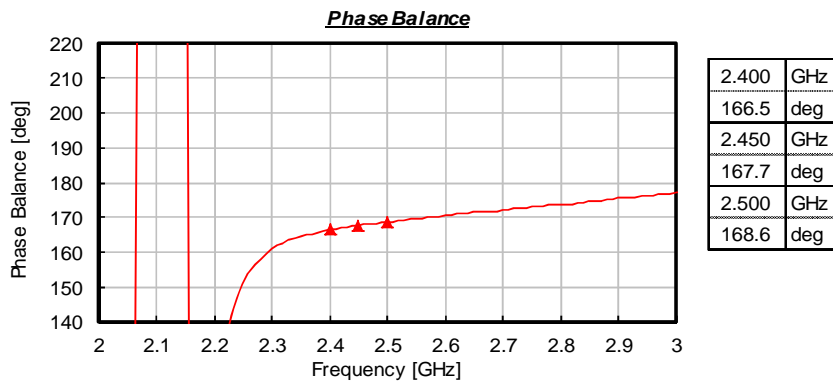
DEA202450BT-7227A1-H

■ FREQUENCY CHARACTERISTICS

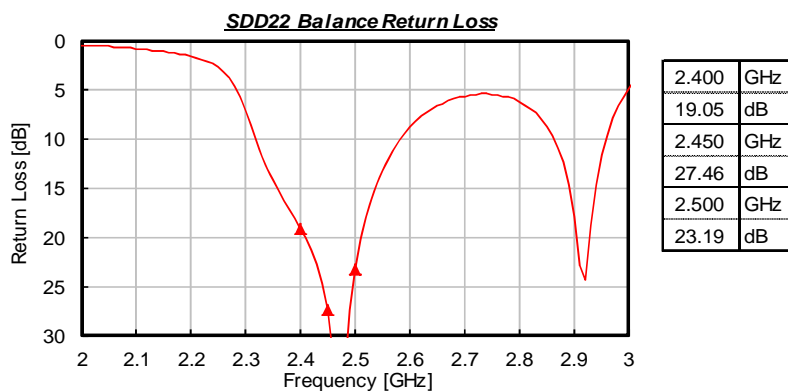
Amplitude Balance



Phase Balance

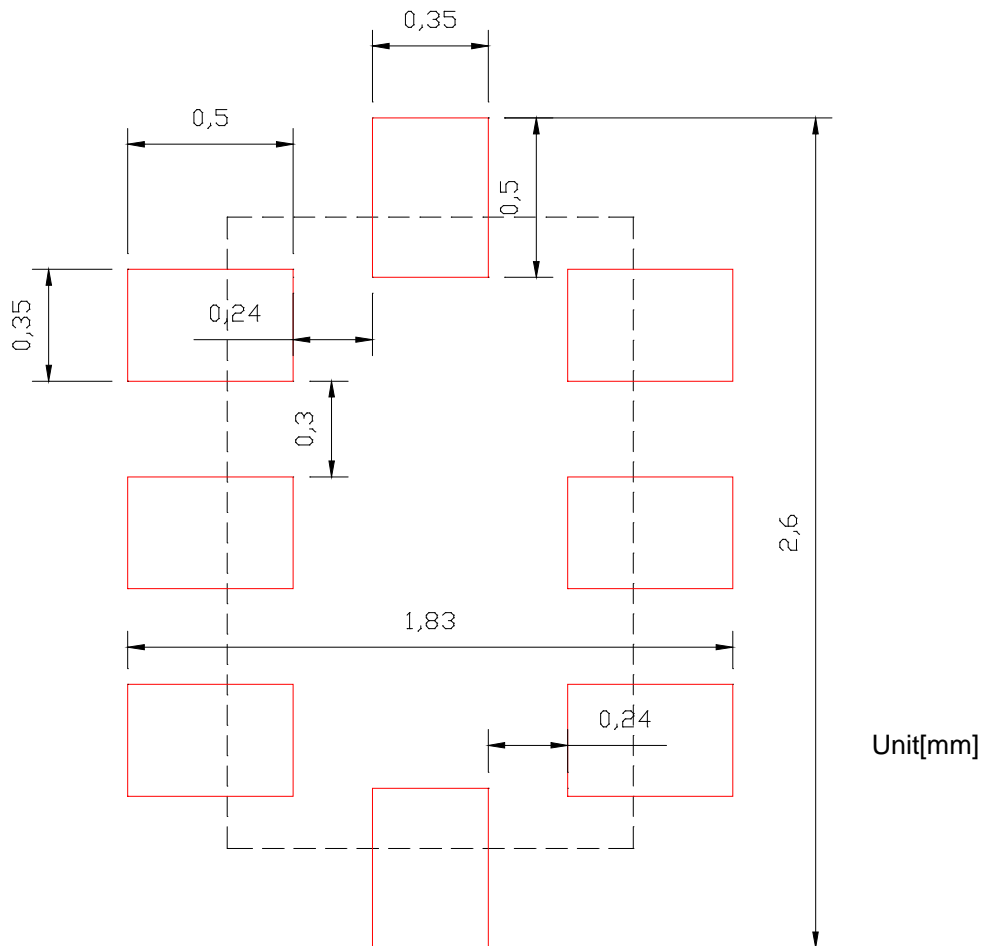


Balance Return Loss



DEA202450BT-7227A1-H

RECOMMENDED LAND PATTERN

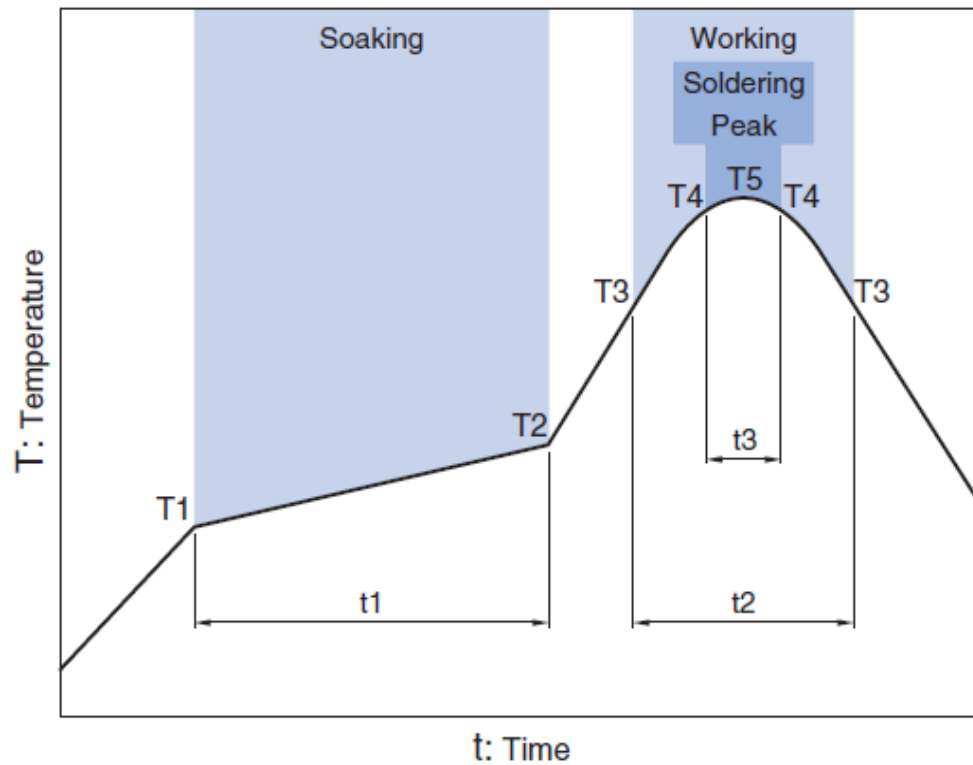


ENVIROMENT INFORMATION

RoHS Statement
RoHS Compliance

DEA202450BT-7227A1-H**RECOMMENDED REFLOW PROFILE**

Pb free solder



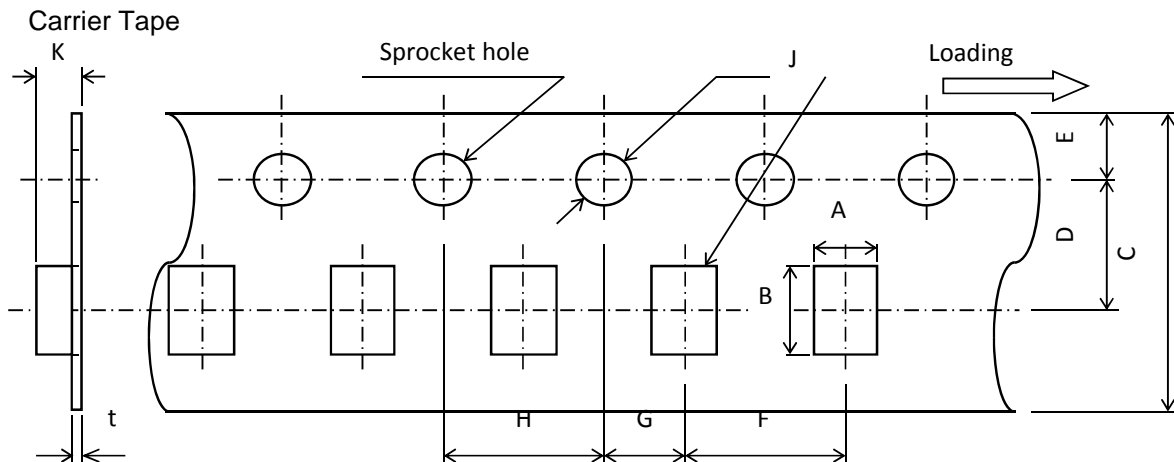
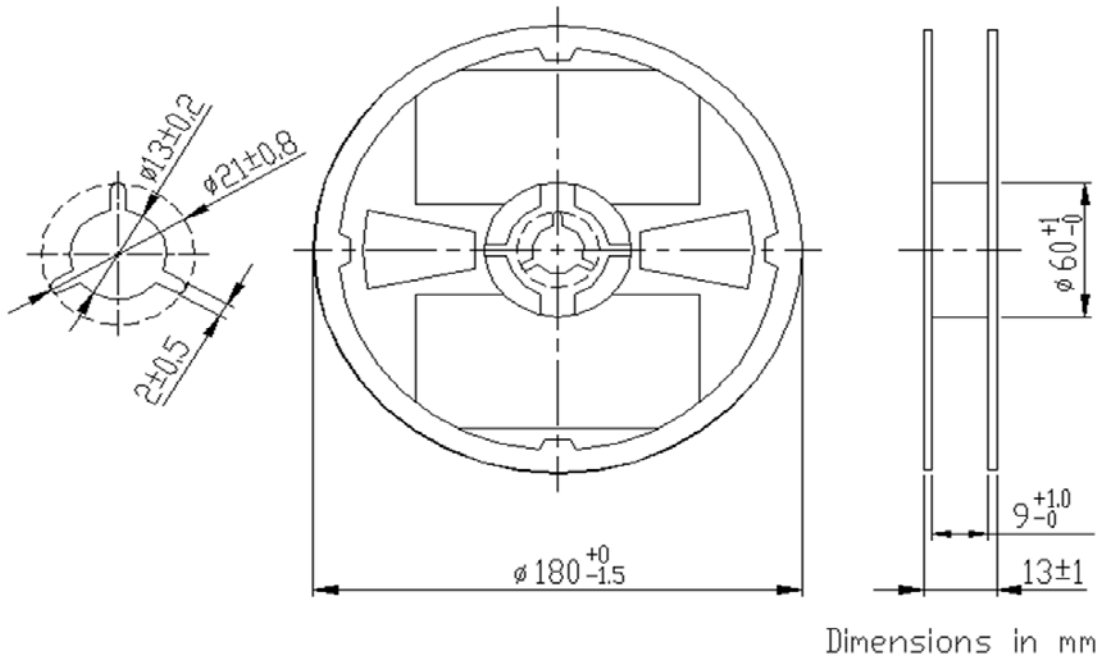
| Soaking | | | Working | | Soldering | | Peak |
|---------|-------|--------------|---------|-----------------|--------------|--------------|------------|
| Temp. | Temp. | Time | Temp. | Time | Temp. | Time | Temp. |
| T1 | T2 | t1 | T3 | t2 | T4 | t3 | T5 |
| 150°C | 180°C | 60 to 120sec | 230°C | more than 30sec | 247 to 253°C | within 10sec | 260°C Max. |

April, 2016 Ver.1.2
TDK Corporation

DEA202450BT-7227A1-H

■ PACKAGING STYLE

Reel Dimensions



Dimensions (mm)

| A | B | C | D | E | F | G | H | J | K | t |
|---------|---------|-----------|---------|--------|--------|---------|--------|---------|------|---------|
| 1.45 | 2.2 | 8.0 | 3.5 | 1.75 | 4.0 | 2.0 | 4.0 | 1.5 | 1.15 | 0.25 |
| +/-0.05 | +/-0.05 | +0.3/-0.1 | +/-0.05 | +/-0.1 | +/-0.1 | +/-0.05 | +/-0.1 | +0.1/-0 | MAX | +/-0.05 |

STANDARD PACKAGE QUANTITY

(pieces/reel)

2,000

All specifications are subject to change without notice.

TDK Technology - Proprietary and Confidential Information of TDK Group Companies

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

The products listed on this specification sheet are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this specification sheet.

1. Aerospace/Aviation equipment
2. Transportation equipment (cars, electric trains, ships, etc.)
3. Medical equipment
4. Power-generation control equipment
5. Atomic energy-related equipment
6. Seabed equipment
7. Transportation control equipment
8. Public information-processing equipment
9. Military equipment
10. Electric heating apparatus, burning equipment
11. Disaster prevention/crime prevention equipment
12. Safety equipment
13. Other applications that are not considered general-purpose applications

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Signal Conditioning category](#):

Click to view products by [TDK manufacturer](#):

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [880157](#) [HHS-109-PIN](#) [DC1417J5005AHF](#) [AFS14A30-2185.00-T3](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [B39321R801H210](#) [1A0220-3](#) [JP510S](#) [LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#)
[FM-104-PIN](#) [CER0813B](#) [MAPDCC0005](#) [3A325](#) [40287](#) [41180](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [BD2425J50200AHF](#)
[C5060J5003AHF](#) [JHS-115-PIN](#) [JP503AS](#) [DC0710J5005AHF](#) [DC2327J5005AHF](#) [DC3338J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#)
[LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#) [CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#)
[PD0922J5050D2HF](#) [1E1305-3](#) [1G1304-30](#) [B0922J7575AHF](#) [2020-6622-20](#) [TP-102-PIN](#) [TP-103-PIN](#) [BD1222J50200AHF](#)