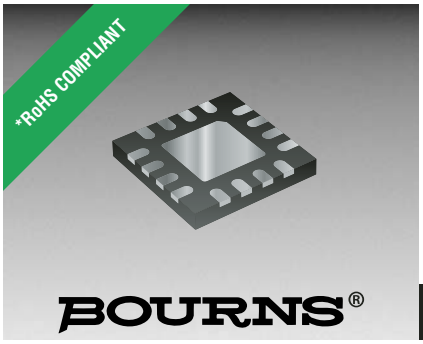

Features

- Lead free as standard
- RoHS compliant*
- ESD protection
- Protects up to eight data lines
- Low insertion loss

Applications

- Cell Phones
- PDAs and Notebooks
- GPS and SMART Cards

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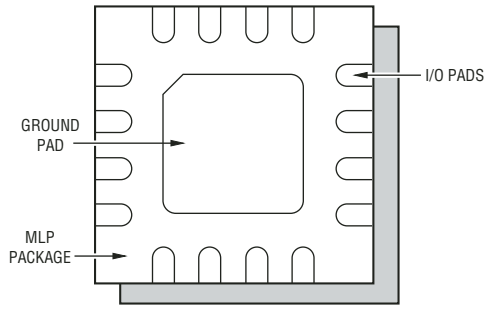
2FAJ-M16R – Integrated Passive & Active Device using MLP

General Information

The 2FAJ-M16R device, manufactured using Thin Film on Silicon technology, provides ESD protection for the external ports of portable electronic devices such as cell phones, modems and PDAs.

The ESD protection provided by the component enables a data port to withstand a minimum ±8 KV Contact /±15 KV Air Discharge per the ESD test method specified in IEC 61000-4-2. The device measures 3 mm x 3 mm and is intended to be mounted directly onto an FR4 printed circuit board. The MLP device meets typical thermal cycle and bend test specifications.



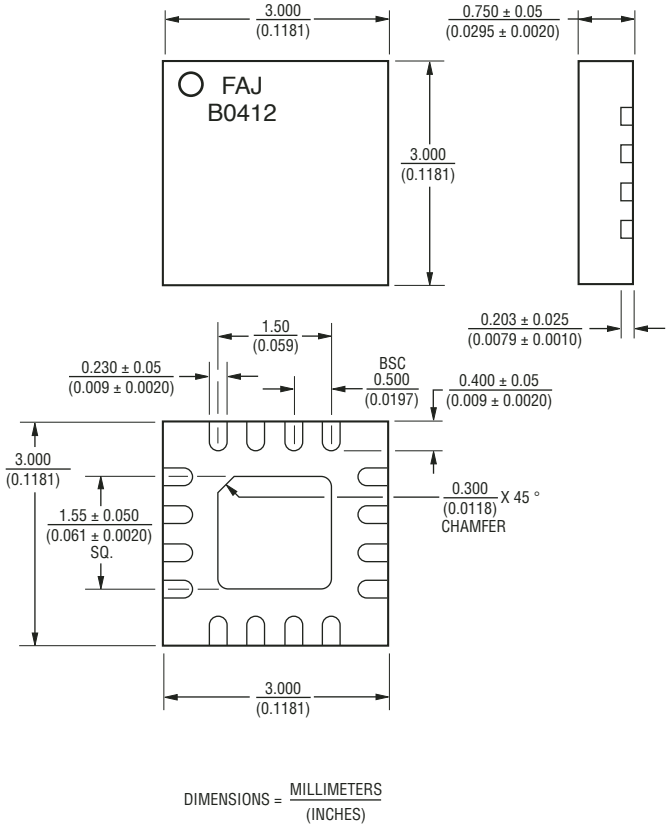
Electrical & Thermal Characteristics

Electrical Characteristics (T_A = 25 °C unless otherwise noted)	**Symbol**	**Minimum**	**Nominal**	**Maximum**	**Unit**
Resistance	R	90	100	110	Ω
Capacitance @ 2.5 V 1 MHz	C	16	20	24	pF
Rated Standoff Voltage	V_{WM}		5.0		V
Breakdown Voltage @ 1 mA	V_{BR}	6.0			V
Forward Voltage @ 10 mA	V_F		0.8		V
Leakage Current @ 3 V	I_D			0.1	µA
ESD Protection: IEC 61000-4-2 Contact Discharge Air Discharge		 ±8 ±15			 kV kV
Thermal Characteristics (T_A = 25 °C unless otherwise noted)					
DC Power Rating	P			100	mW
Operating Temperature Range	T_J	-40	25	+85	°C
Storage Temperature Range	T_{STG}	-55	25	+150	°C

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex

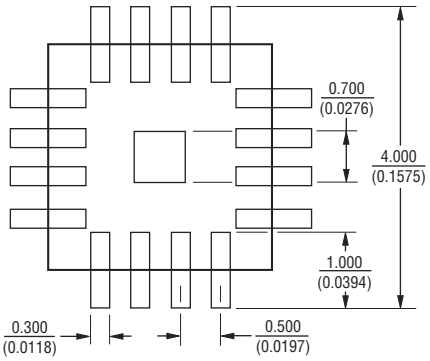
Product Dimensions

This silicon-based device is packaged using micro leadframe packaging technology. The MLPs have an exposed die attach pad that provides the interconnect medium from die to PCB. The pads are arranged for easy PCB routing. The pitch is 0.5 mm and the dimensions for the packaged device are shown below.



DIMENSIONS = MILLIMETERS / (INCHES)

Recommended Pad Layout



How to Order

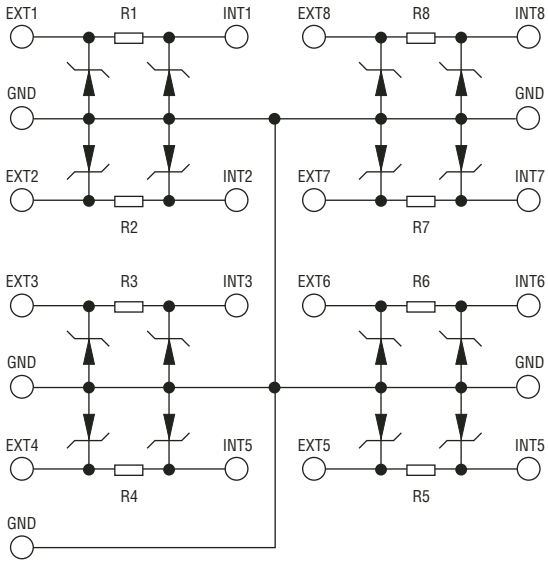
2 FAJ – M 16 R

- Thin Film
- Model
- MLP Package
- No. of Solder Pads
- Packaging Option
  - R = Tape and Reel
    Packaged 3000 pcs. / 13 ″ reel

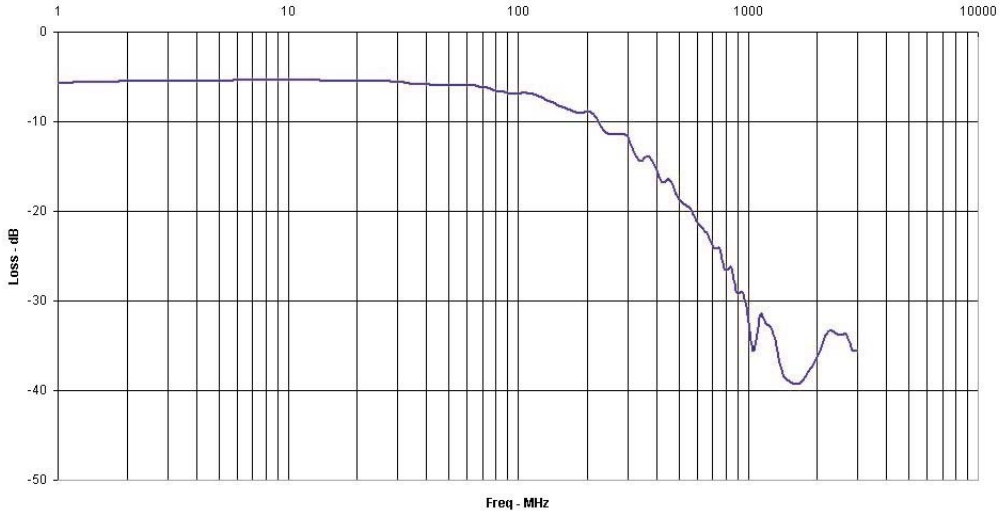
(100 % Sn Termination)

Block Diagram

The MLP Device block diagram below includes the pin names and basic electrical connections associated with each channel.

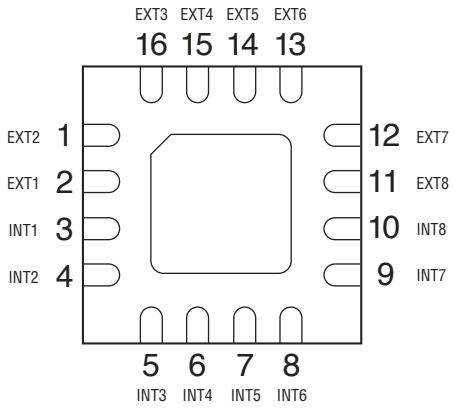


Frequency Response



Device Pin Out

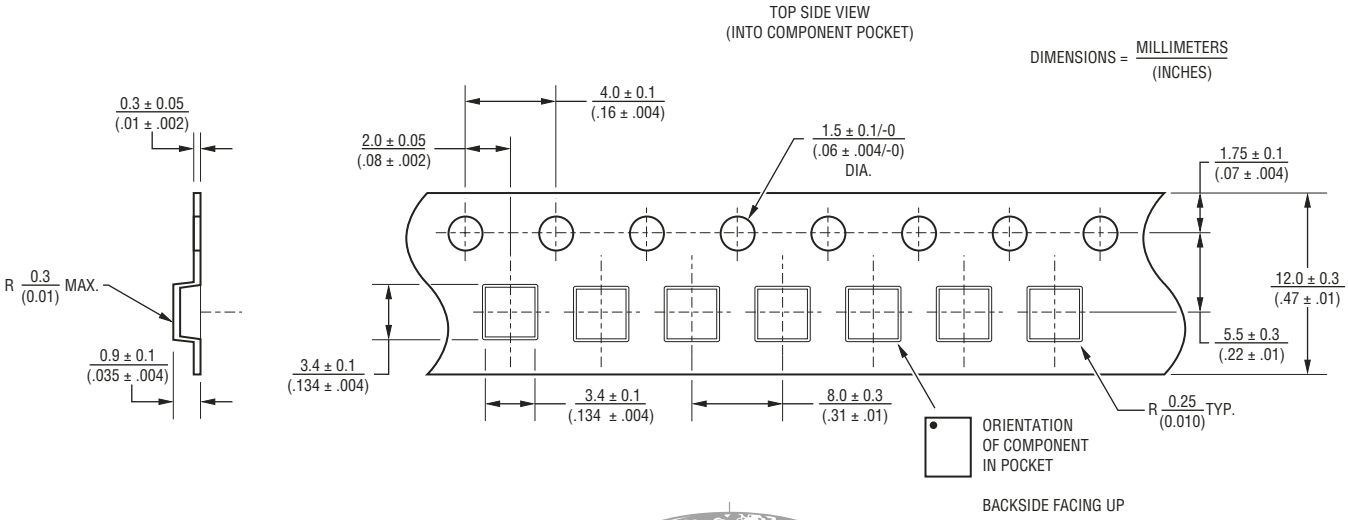
The Pin-Out for the device is shown below. Note also that the device is shown with bottom side pads facing up.



Pin Out	Function	Pin Out	Function	Pin Out	Function	Pin Out	Function
Pin1	EXT2	Pin5	INT3	Pin9	INT7	Pin13	EXT6
Pin2	EXT1	Pin6	INT4	Pin10	INT8	Pin14	EXT5
Pin3	INT1	Pin7	INT5	Pin11	EXT8	Pin15	EXT4
Pin4	INT2	Pin8	INT6	Pin12	EXT7	Pin16	EXT3

Packaging

The surface mount product is packaged in a 12 mm x 8 mm Tape and Reel format per EIA-481 standard.



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