

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

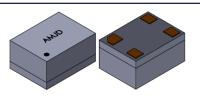
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









## **AMJD-SERIES**



1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

**RoHS/RoHS II Compliant** 

MSL = MSL 1

## **FEATURES**

- Output selectable between 2 frequencies
- Compact footprint as small as 1.6x1.2mm
- Low 0.84mm profile
- Low power consumption
- 1MHz to 100MHz output frequency range
- Short lead time for new frequencies
- Wide -40°C to +85°C operating temperature range
- Low operating current: 3mA IDD (typ)

## APPLICATIONS

- Wearables
- Internet of Things (IoT)
- Industrial IoT
- Audio and video
- Drones and robotics

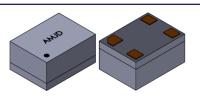
## **ELECTRICAL SPECIFICATIONS**

Electrical characteristics unless otherwise indicated,  $V_{DD}$  = 1.8V -5% to 3.3V +10%, temperature range -40°C to 85 °C

| Paramet                    | ers                            | Min.                | Тур. | Max.                | Units | Note                                                    |
|----------------------------|--------------------------------|---------------------|------|---------------------|-------|---------------------------------------------------------|
| Frequency                  | Range                          | 1.0000              |      | 100.0000            | MHz   |                                                         |
| Power Supply Vo            | oltage (V <sub>DD</sub> )      | 1.71                |      | 3.63                | V     |                                                         |
| Current Consum             | nption (I <sub>DD</sub> )      |                     | 3.0  |                     | mA    | $f_{out} = 27MHz, V_{DD} = 1.8V,$<br>No Load            |
| Operating Temper           | rature Range                   | -40                 |      | +85                 | °C    | See Options                                             |
| Storage Tem                | perature                       | -55                 |      | +150                | °C    |                                                         |
| All Inclusive Frequ        | ency Stability                 | -25                 |      | +25                 | nnm   | Options "D" or "F"                                      |
| All metusive Frequ         | iency Stability                | -50                 |      | +50                 | ppm   | Options "E" or "G"                                      |
| Agine                      |                                | -5                  |      | +5                  | 2222  | 1st year @25°C                                          |
| Aging                      | 3                              | -1                  |      | +1                  | ppm   | Per year after first year                               |
| Duty Cy                    | rcle                           | 45                  |      | 55                  | %     |                                                         |
| Output Logic Levels        | Logic High ${ m V}_{ m OH}$    | 0.8*V <sub>DD</sub> |      |                     | V     | Std Drive option: I = 3mA  High Drive option: I = 6 mA  |
|                            | Logic Low<br>V <sub>OL</sub>   |                     |      | 0.2*V <sub>DD</sub> |       | Std Drive option: I = -3mA High Drive option: I = -6 mA |
| Input Logic Levels         | Logic High ${ m V}_{_{ m IH}}$ | 0.7*V <sub>DD</sub> |      |                     | V     |                                                         |
| input Logic Leveis         | Logic Low $V_{_{\rm IL}}$      |                     |      | 0.3*V <sub>DD</sub> | v     |                                                         |
| Enable Pull-U <sub>l</sub> | o Resistor                     |                     | 300  |                     | kΩ    |                                                         |
| Power Supply I             | Ramp (t <sub>PU</sub> )        | 0.1                 |      | 100                 | ms    | Time to 90% targeted $V_{\scriptscriptstyle DD}$        |
| Start-up Tir               | ne (t <sub>su</sub> )          |                     |      | 1.3                 | ms    | From 90% V <sub>DD</sub> to valid clock output, @ 25°C  |



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**RoHS/RoHS II Compliant** 

MSL = MSL 1

## **ELECTRICAL SPECIFICATIONS**

| Parameters                                        |                             | min | Тур. | Max. | Units | Note                                            |                                                     |  |  |     |     |  |
|---------------------------------------------------|-----------------------------|-----|------|------|-------|-------------------------------------------------|-----------------------------------------------------|--|--|-----|-----|--|
| Frequency Select Switch                           | ing Time (t <sub>fs</sub> ) |     | 40   |      | μs    |                                                 |                                                     |  |  |     |     |  |
|                                                   | W. 1 D.                     |     | 1    | 1.5  |       | $CL = 15 \text{ pF}   V_{DD} = 1.8 \text{V}$    |                                                     |  |  |     |     |  |
| Rise(T <sub>r</sub> )/Fall (T <sub>f</sub> ) Time | High Drive<br>20% ↔ 80%     | •   |      | 0.5  | 1.0   | ns                                              | CL = 15  pF<br>$V_{DD} = 2.5 \text{V}/3.3 \text{V}$ |  |  |     |     |  |
|                                                   | Std Drive<br>20% ↔ 80%      |     | 1.2  | 2.0  | 115   | $CL = 10 \text{ pF} \mid V_{DD} = 1.8 \text{V}$ |                                                     |  |  |     |     |  |
|                                                   |                             |     |      |      |       |                                                 |                                                     |  |  | 1.5 | 2.2 |  |
| DMC D : 1 I''                                     | $f_{out} =$                 |     | 9.5  | 11   |       | $V_{DD} = 1.8 \text{ V}$                        |                                                     |  |  |     |     |  |
| RMS Period Jitter                                 | 27 MHz                      |     | 7.5  | 9    | ps    | $V_{DD} = 2.5V/3.3V$                            |                                                     |  |  |     |     |  |
| Cycle-to-Cycle Jitter                             | $f_{out} =$                 | =   | 50   | 70   |       | $V_{DD} = 1.8 \text{ V}$                        |                                                     |  |  |     |     |  |
| (Peak)                                            | 27 MHz                      |     | 35   | 60   | ps    | $V_{DD} = 2.5 V/3.3 V$                          |                                                     |  |  |     |     |  |

## **ABSOLUTE MAXIMUM RATINGS**

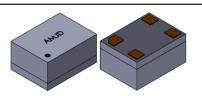
| Parameters                        | min                         | Тур. | Max.                 | Units | Note                |
|-----------------------------------|-----------------------------|------|----------------------|-------|---------------------|
| Supply Voltage                    | -0.3                        |      | +4.0                 | V     |                     |
| Input Voltage                     | -0.3                        |      | V <sub>DD</sub> +0.3 | V     |                     |
| Maximum Junction Temperature      |                             |      | +150                 | °C    |                     |
| Ambient Operating Temperature     | -40                         |      | +85                  | °C    | Industrial          |
| Ambient Operating Temperature     | -20                         |      | +70                  | °C    | Extended Commercial |
| Storage Ambient Temperature Range | -55                         |      | +150                 | °C    |                     |
| Soldering Temperature             |                             | +260 |                      | °C    | 40 Sec Maximum      |
| ESD Protection                    | 4 kV HBM, 400V MM, 2 kV CDM |      |                      |       |                     |



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#### **AMJD-SERIES**

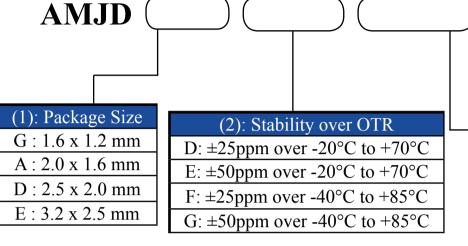


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RoHS/RoHS II Compliant

MSL = MSL 1

#### **OPTIONS AND PART IDENTIFICATION**



(4): Output Frequencies

See table 1 for Common dual frequency pairs.

Contact Abracon for custom frequency pairs.

(5): Packaging

Blank: Bulk\*\*
T: Tape & Reel
(1kpcs / reel)

T3: Tape & Reel (3kpcs / reel)

<u>Part Number Example:</u>

AMJDGGJ-A01T

| (3): Output Drive/Pin 1 Function |                     |                  |  |  |  |
|----------------------------------|---------------------|------------------|--|--|--|
| Option                           | <b>Output Drive</b> | Pin 1 Function   |  |  |  |
| Н                                | Standard            | Frequency Select |  |  |  |
| J                                | High                | Frequency Select |  |  |  |

| Frequency Code | Frequency 1 | Frequency 2 |
|----------------|-------------|-------------|
| A01            | 20.000 MHz  | 25.000 MHz  |
| A02            | 50.000 MHz  | 25.000 MHz  |
| A03            | 40.000 MHz  | 80.000 MHz  |
| A04            | 74.250 MHz  | 74.1758 MHz |
| A05            | 25.000 MHz  | 27.000 MHz  |
| A06            | 26.000 MHz  | 27.000 MHz  |
| A07            | 19.440 MHz  | 25.000 MHz  |
| A08            | 12.000 MHz  | 24.000 MHz  |

| Frequency Code | Frequency 1 | Frequency 2   |
|----------------|-------------|---------------|
| A09            | 24.000 MHz  | 48.000 MHz    |
| A10            | 48.000MHz   | 50.000MHz     |
| A11            | 50.000 MHz  | 100.000 MHz   |
| A12            | 75.000 MHz  | 100.000 MHz   |
| A13            | 6.16791 MHz | 6.1298496 MHz |
| A14            | 27.000 MHz  | 32.000 MHz    |
| A15            | 25.000 MHz  | 32.000 MHz    |
| A16            | 12.000 MHz  | 48.000 MHz    |

\*\*MOQ per package:

1.6x1.2mm: 100pcs/bag 2.0x1.6mm: 100pcs/bag 2.5x2.0mm: 140 pcs/tube 3.2x2.5mm: 110 pcs/tube

For Quick turn-around programmable sample orders <u>less than MOQ</u> represented above:

Due to the immediate availability of stock and the qty of the order, the parts may be delivered as Cut Tape, Loose parts in Antistatic Bag or in Tube(s).

For orders equal to or greater than MOQ and less than 1000pcs:

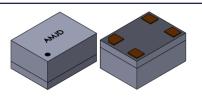
Due to packaging, the order must be a multiple of MOQ per package size above

For orders equal to or greater than 1000pcs:

Bulk is not an option. Please refer to tape and reel packaging.



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## **AMJD-SERIES**



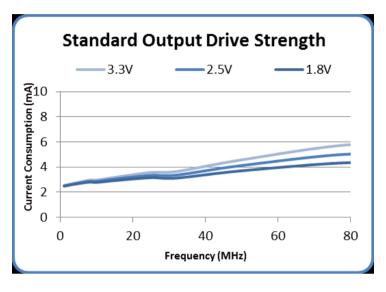
Pb 2.0 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

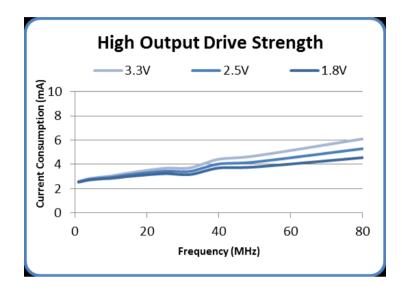
RoHS/RoHS II Compliant MSL = MSL 1

ESD Sensitive 3.

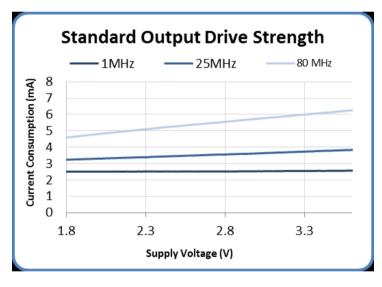
## TYPICAL PERFORMANCE DATA @ 25°C ± 3°C

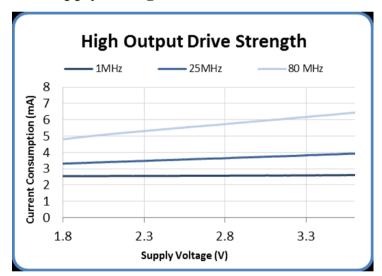
## **Current Consumption vs Frequency**





## **Current Consumption vs Supply Voltage**





#### **PINFUNCTIONS**

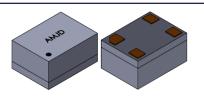
| Pin Number | Pin Name        | Description                                           |  |  |
|------------|-----------------|-------------------------------------------------------|--|--|
| 1          | FS              | Frequency Select Note 1&3: High or Open = Frequency 1 |  |  |
| 1          | ГЗ              | Low = Frequency 2                                     |  |  |
| 2          | GND             | Power Supply Ground                                   |  |  |
| 3          | Output          | Oscillator Clock Output                               |  |  |
| 4          | V <sub>DD</sub> | Power Supply Note 2                                   |  |  |

#### **Notes:**

- 1. If pin 1 is high or floating, frequency 1 will be engaged on pin 3. If pin 1 is low, frequency 2 will be engaged on pin 3.
- 2. Bypass with 0.1  $\mu F$  capacitor placed as close to  $V_{\mbox{\tiny DD}}$  pin as possible.
- 3. 300 K $\Omega$  internal pull-up resistor present on pin 1.



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RoHS/RoHS II Compliant

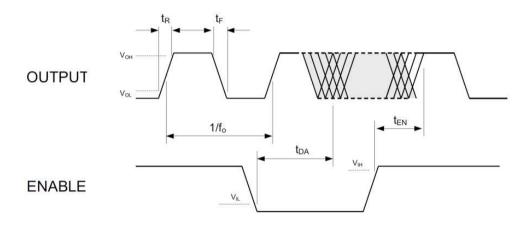
MSL = MSL 1

#### **OUTPUT BUFFER OPTIONS**

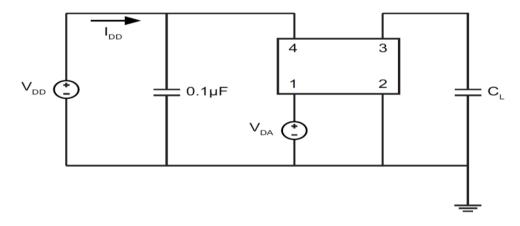
The AMJD Series is available in multiple output driver configurations. The standard-drive and high-drive deliver respective output currents of greater than 3 mA and 6 mA at 20% to 80% of the supply voltage. For loads of 15 pF or higher, the high-drive option is recommended.

## **DIAGRAMS**

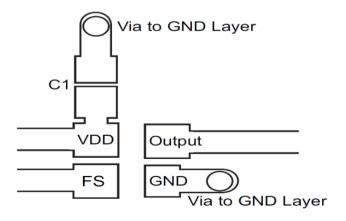
**Output Waveform** 



**Test Circuit** 

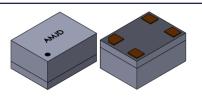


Recommended Board Layout





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## **AMJD-SERIES**



Lot Code

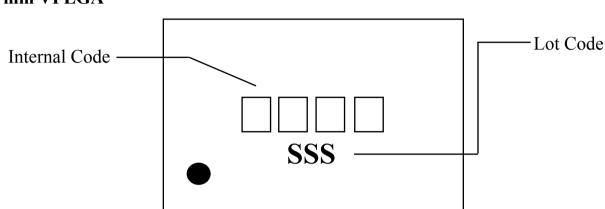
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

**RoHS/RoHS II Compliant** 

MSL = MSL 1

## MARKING

1.6 mm x 1.2 mm VFLGA 2.0 mm x 1.6 mm VFLGA



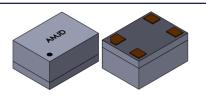
2.5 mm x 2.0 mm VLGA
3.2 mm x 2.5 mm DFN

Blank: Quick turn-around programmable orders < 1000pcs XXXX: Internal frequency configuration code, 4 digits e.g. 0036

YY (Year): e.g. 18 for 2018
WW (Week): e.g. 08 for the 8th week of the year



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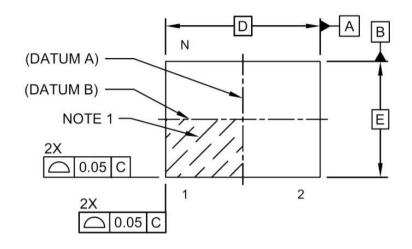
**RoHS/RoHS II Compliant** 

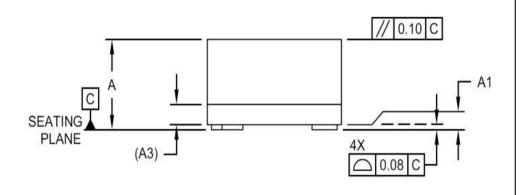
MSL = MSL 1

## **MECHANICAL DIMENSIONS**

## 1.6 x 1.2 mm VFLGA Package Outline

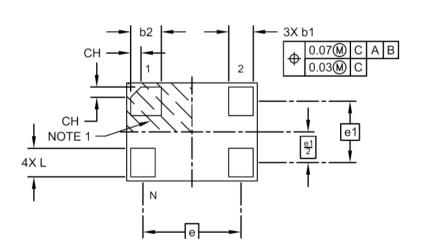
## **Top View**





| Description                          | Marker | Dimensions (mm)  |
|--------------------------------------|--------|------------------|
| Number of Terminals                  | N      | 4                |
| Terminal Pitch                       | e      | 1.20 BSC         |
| Terminal Pitch                       | e1     | 0.75 BSC         |
| Overall Height                       | A      | $0.84 \pm 0.05$  |
| Standoff*                            | A1     | .02              |
| Substrate Thickness (with Terminals) | A3     | 0.20REF          |
| Overall Length                       | D      | 1.60BSC          |
| Overall Width                        | Е      | 1.20BSC          |
| Terminal Width                       | b1     | $0.30 \pm 0.05$  |
| Terminal Width                       | b2     | $0.375 \pm 0.05$ |
| Terminal Length                      | L      | $0.35 \pm 0.05$  |
| Terminal 1 Index Chamfer             | СН     | 0.125            |

## **Bottom View**



\*Standoff max .05 mm and min 0.00 mm

Dimensioning and tolerance per ASME Y14.5M

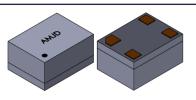
**Side View** 

BSC: Basic Dimension. Theoretically exact value shown without tolerances REF: Reference Dimension, usually without tolerance, for information

purposes only



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## **AMJD-SERIES**



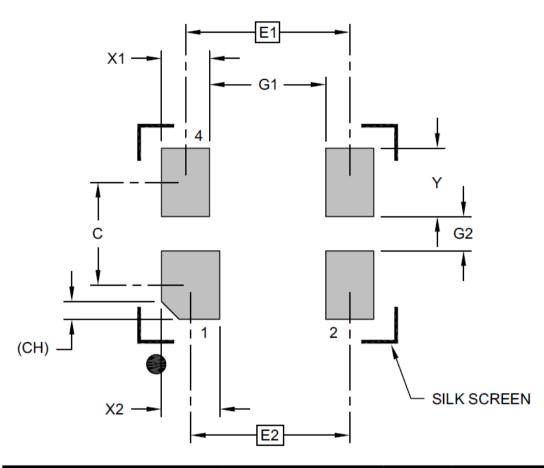
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

**RoHS/RoHS II Compliant** 

MSL = MSL 1

## **MECHANICAL DIMENSIONS**

## **Recommended Landing Pattern**



| Description             | Marker | Max  | Тур      | Max  | Unit |
|-------------------------|--------|------|----------|------|------|
| Contact Pitch           | E1     | 1.   | 20 BSC   |      |      |
| Contact Pitch           | E2     | 1.   | 16 BSC   |      |      |
| Contact Spacing         | C      |      | 0.75     |      |      |
| Contact Width           | X1     |      |          | 0.35 |      |
| Contact Width           | X2     |      |          | 0.43 | mm   |
| Contact Pad Length      | Y      |      |          | 0.50 |      |
| Space Between Contacts  | G1     | 0.85 |          |      |      |
| Space Between Contacts  | G2     | 0.25 |          |      |      |
| Contact 1 Index Chamfer | СН     | 0.13 | x 45° RE | F    |      |

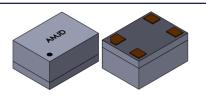
Dimensioning and tolerance per ASME Y14.5M

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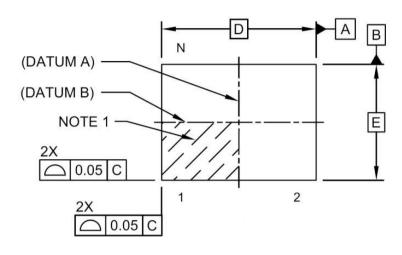
**RoHS/RoHS II Compliant** 

MSL = MSL 1

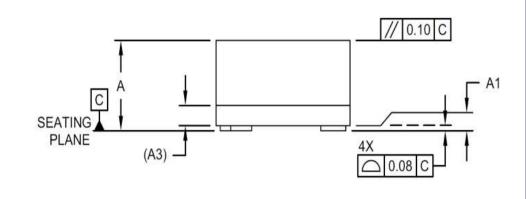
#### **MECHANICAL DIMENSIONS**

## 2.0 x 1.6 mm VFLGA Package Outline

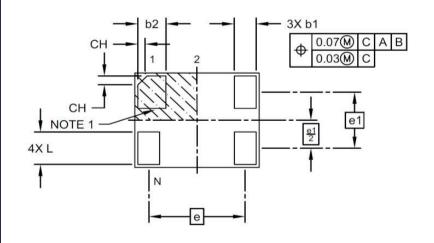
## **Top View**



#### **Side View**



## **Bottom View**



| Description                          | Marker | Dimensions (mm) |
|--------------------------------------|--------|-----------------|
| Number of Terminals                  | N      | 4               |
| Terminal Pitch                       | e      | 1.55 BSC        |
| Terminal Pitch                       | e1     | 0.95 BSC        |
| Overall Height                       | A      | $0.84 \pm 0.05$ |
| Standoff*                            | A1     | .02             |
| Substrate Thickness (with Terminals) | A3     | 0.20 REF        |
| Overall Length                       | D      | 2.00 BSC        |
| Overall Width                        | Е      | 1.60 BSC        |
| Terminal Width                       | b1     | $0.35 \pm 0.05$ |
| Terminal Width                       | b2     | $0.45 \pm 0.05$ |
| Terminal Length                      | L      | $0.55 \pm 0.05$ |
| Terminal 1 Index Chamfer             | СН     | 0.15            |

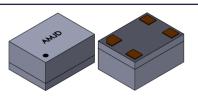
<sup>\*</sup>Standoff max .05 mm and min 0.00 mm

Dimensioning and tolerance per ASME Y14.5M

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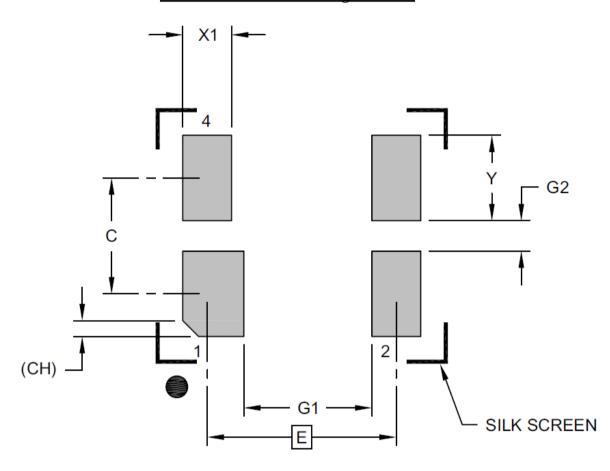
**RoHS/RoHS II Compliant** 

MSL = MSL 1

ESD Sensitive

## MECHANICAL DIMENSIONS

## **Recommended Landing Pattern**



| Description             | Marker | Max            | Тур    | Max  | Unit |
|-------------------------|--------|----------------|--------|------|------|
| Contact Pitch           | E2     | 1.             | 55 BSC |      |      |
| Contact Spacing         | C      |                | 0.95   |      |      |
| Contact Width           | X1     |                |        | 0.50 |      |
| Contact Width           | X2     |                |        | 0.40 |      |
| Contact Pad Length      | Y      |                |        | 0.70 | mm   |
| Space Between Contacts  | G1     | 1.05           |        |      |      |
| Space Between Contacts  | G2     | 0.25           |        |      |      |
| Contact 1 Index Chamfer | СН     | 0.13 x 45° REF |        |      |      |

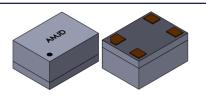
Dimensioning and tolerance per ASME Y14.5M

BSC: Basic Dimension. Theoretically exact value shown without tolerances

REF: Reference Dimension, usually without tolerance, for information purposes only



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## **AMJD-SERIES**



1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

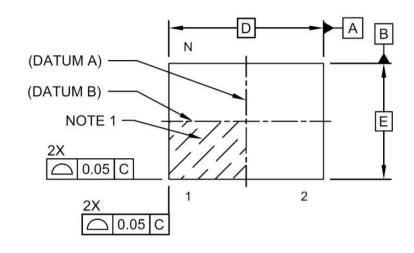
**RoHS/RoHS II Compliant** 

MSL = MSL 1

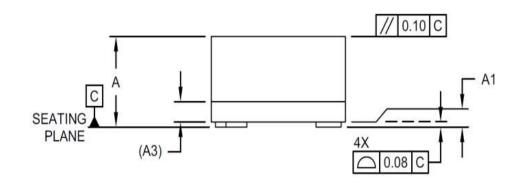
## **MECHANICAL DIMENSIONS**

## 2.5 x 2.0 mm VLGA Package Outline

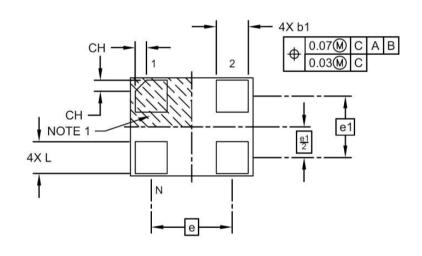
## **Top View**



## **Side View**



## **Bottom View**



| Description                          | Marker | Dimensions (mm) |
|--------------------------------------|--------|-----------------|
| Number of Terminals                  | N      | 4               |
| Terminal Pitch                       | e      | 1.65 BSC        |
| Terminal Pitch                       | e1     | 1.25 BSC        |
| Overall Height                       | A      | $0.84 \pm 0.05$ |
| Standoff*                            | A1     | .02             |
| Substrate Thickness (with Terminals) | A3     | 0.20REF         |
| Overall Length                       | D      | 2.50BSC         |
| Overall Width                        | Е      | 2.00BSC         |
| Terminal Width                       | b1     | $0.65 \pm 0.05$ |
| Terminal Length                      | L      | $0.65 \pm 0.05$ |
| Terminal 1 Index Chamfer             | СН     | 0.225           |

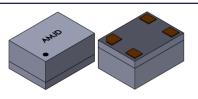
<sup>\*</sup>Standoff max .05 mm and min 0.00 mm

Dimensioning and tolerance per ASME Y14.5M

BSC: Basic Dimension. Theoretically exact value shown without tolerances REF: Reference Dimension, usually without tolerance, for information purposes only



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## **AMJD-SERIES**



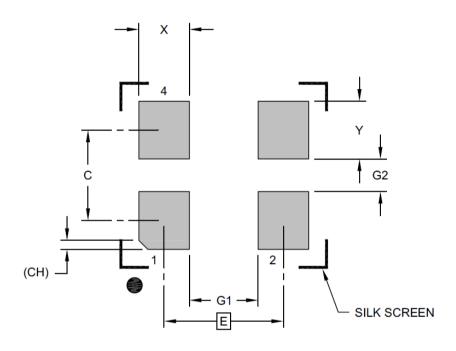
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

RoHS/RoHS II Compliant

MSL = MSL 1

## MECHANICAL DIMENSIONS

## **Recommended Landing Pattern**



| Description             | Marker | Max            | Тур  | Max  | Unit   |
|-------------------------|--------|----------------|------|------|--------|
| Contact Pitch           | Е      | 1.65 BSC       |      |      |        |
| Contact Spacing         | C      |                | 1.25 |      |        |
| Contact Width           | X1     |                |      | 0.70 |        |
| Contact Width           | X2     |                |      | 0.80 | mm     |
| Contact Pad Length      | Y      |                |      | 0.50 | 111111 |
| Space Between Contacts  | G1     | 0.95           |      |      |        |
| Space Between Contacts  | G2     | 0.45           |      |      |        |
| Contact 1 Index Chamfer | СН     | 0.13 x 45° REF |      |      |        |

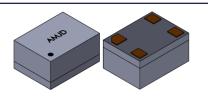
Dimensioning and tolerance per ASME Y14.5M

BSC: Basic Dimension. Theoretically exact value shown without tolerances

REF: Reference Dimension, usually without tolerance, for information purposes only



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## **AMJD-SERIES**



1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

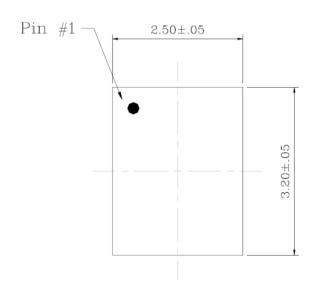
**RoHS/RoHS II Compliant** 

MSL = MSL 1

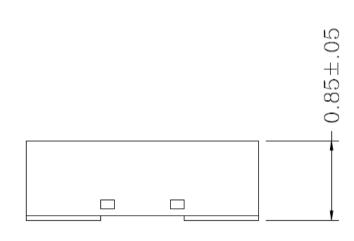
## MECHANICAL DIMENSIONS

## 3.2 x 2.5 mm DFN Package Outline

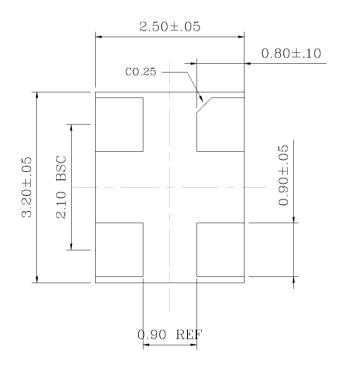
## **Top View**



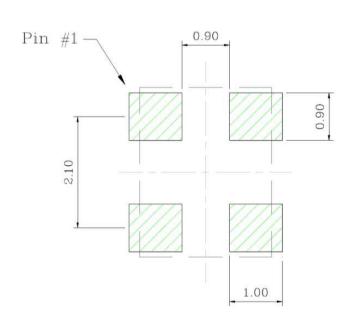
## **Side View**



## **Bottom View**



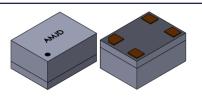
## **Recommended Landing Pattern**



**Dimensions: mm** 



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## **AMJD-SERIES**

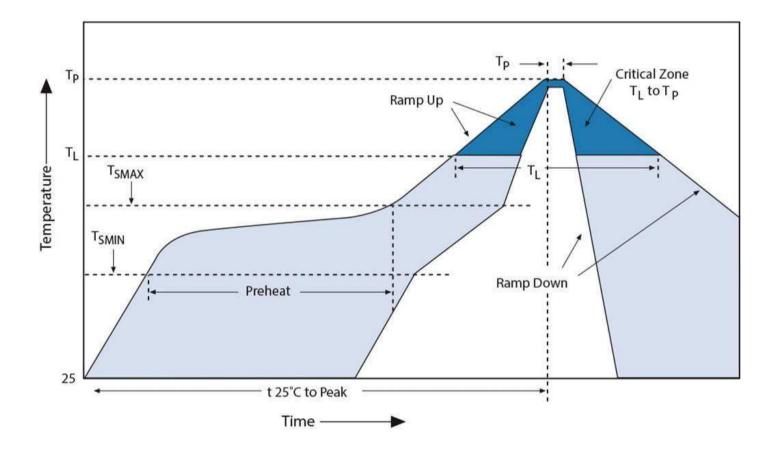


1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

**RoHS/RoHS II Compliant** 

MSL = MSL 1

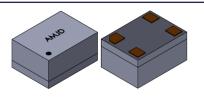
## **REFLOW PROFILE**



| Zone | Description    | Temperature                                                                                                         | Time            |
|------|----------------|---------------------------------------------------------------------------------------------------------------------|-----------------|
| 1    | Preheat / Soak | $\begin{array}{c} T_{\text{SMIN}} \sim T_{\text{SMAX}} \\ 150^{\circ}\text{C} \sim 200^{\circ}\text{C} \end{array}$ | 60 ~ 180 sec.   |
| 2    | Reflow         | Т <sub>ь</sub><br>217°С                                                                                             | 60 ~ 150 sec.   |
| 3    | Peak heat      | T <sub>P</sub><br>255°C - 260°C                                                                                     | 20-40 sec. MAX. |



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## **AMJD-SERIES**



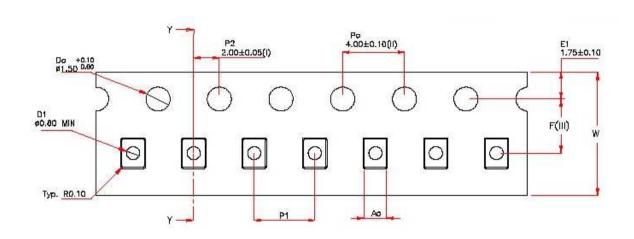
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

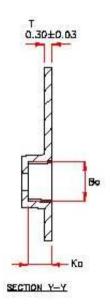
**RoHS/RoHS II Compliant** 

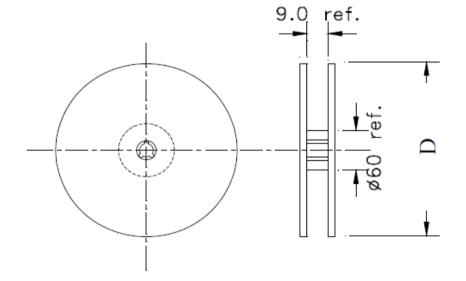
MSL = MSL 1

## **PACKAGING**

Bulk MOQ= 100pcs/Bag\* T= 1,000pcs/reel (D=180mm) T3= 3,000pcs/reel (D=180mm) Affected Package Size: 1.6 mm x 1.2 mm VFLGA







| $A_0$            | $1.40 \pm 0.05$  |
|------------------|------------------|
| $\mathbf{B}_{0}$ | $1.80 \pm 0.05$  |
| $K_0$            | $1.05 \pm 0.05$  |
| F                | $3.50 \pm 0.05$  |
| $P_{1}$          | $4.00 \pm 0.10$  |
| W                | 8.00 +0.30/-0.10 |

## **Dimensions: mm**

\* For Quick turn-around programmable sample orders <u>less than MOQ</u> represented above: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as Cut Tape, Loose parts in Antistatic Bag or in Tube(s).

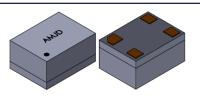
For orders <u>equal to or greater than MOQ</u> and <u>less than 1000pcs</u>: Due to packaging, the order must be a multiple of MOQ per package size above

For orders equal to or greater than 1000pcs:

Bulk is not an option. Please refer to tape and reel packaging.



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## **AMJD-SERIES**



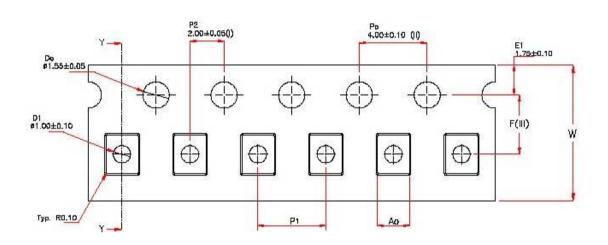
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

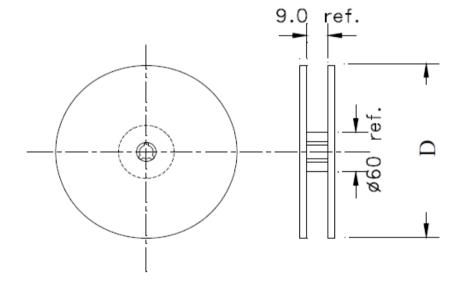
**RoHS/RoHS II Compliant** 

MSL = MSL 1

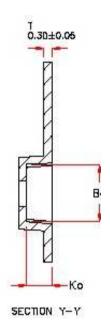
## **PACKAGING**

Bulk MOQ= 100pcs/Bag\* T= 1,000pcs/reel (D=180mm) T3= 3,000pcs/reel (D=180mm)





# Affected Package Sizes: 2.0 mm x 1.6 mm VFLGA



| $A_{0}$          | $1.90 \pm 0.05$  |
|------------------|------------------|
| $\mathbf{B}_{0}$ | $2.30 \pm 0.05$  |
| $K_0$            | $1.05 \pm 0.05$  |
| F                | $3.50 \pm 0.05$  |
| $P_1$            | $4.00 \pm 0.10$  |
| W                | 8.00 +0.30/-0.10 |

#### **Dimensions: mm**

\* For Quick turn-around programmable sample orders <u>less than MOQ</u> represented above: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as Cut Tape, Loose parts in Antistatic Bag or in Tube(s).

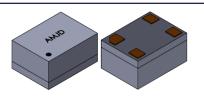
For orders <u>equal to or greater than MOQ</u> and <u>less than 1000pcs</u>: Due to packaging, the order must be a multiple of MOQ per package size above

For orders equal to or greater than 1000pcs:

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## **AMJD-SERIES**



1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

RoHS/RoHS II Compliant

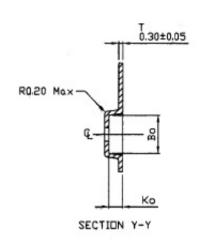
MSL = MSL 1

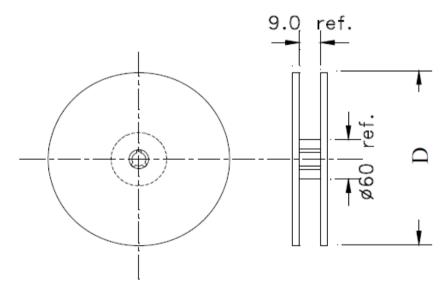
## **PACKAGING**

Bulk MOQ= 140pcs/Tube\* T= 1,000pcs/reel (D=180mm) T3= 3,000pcs/reel (D=180mm)

# Po 4.0±0.10 (II) Do 4.0±0.10 (II) P1.50 nin. P2.0±0.05 (I) P0 4.0±0.10 (II) F1.75±0.1

Affected Package Sizes: 2.5 mm x 2.0 mm VLGA





| $A_0$            | $2.25 \pm 0.05$  |
|------------------|------------------|
| $\mathbf{B}_{0}$ | $2.80 \pm 0.05$  |
| $K_0$            | $1.10 \pm 0.05$  |
| F                | $3.50 \pm 0.05$  |
| $P_{_1}$         | $4.00 \pm 0.10$  |
| W                | 8.00 +0.30/-0.10 |

#### **Dimensions: mm**

\* For Quick turn-around programmable sample orders <u>less than MOQ</u> represented above: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as Cut Tape, Loose parts in Antistatic Bag or in Tube(s).

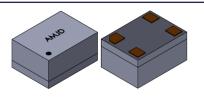
For orders equal to or greater than MOQ and less than 1000pcs: Due to packaging, the order must be a multiple of MOQ per package size above

For orders equal to or greater than 1000pcs:

Bulk is not an option. Please refer to tape and reel packaging.



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## **AMJD-SERIES**



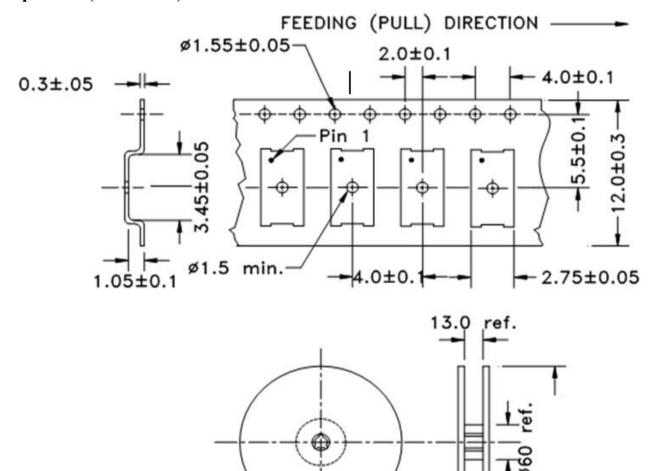
1.6 x 1.2 x 0.84 mm 2.0 x 1.6 x 0.84 mm 2.5 x 2.0 x 0.84 mm 3.2 x 2.5 x 0.85 mm

RoHS/RoHS II Compliant

MSL = MSL 1

## **PACKAGING**

Bulk MOQ= 110pcs/Tube\* T= 1,000pcs/reel (D=180mm) T3= 3,000pcs/reel (D=180mm) Affected Package Sizes: 3.2 mm x 2.5 mm DFN



## **Dimensions: mm**

\* For Quick turn-around programmable sample orders <u>less than MOQ</u> represented above: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as Cut Tape, Loose parts in Antistatic Bag or in Tube(s).

For orders <u>equal to or greater than MOQ</u> and <u>less than 1000pcs</u>: Due to packaging, the order must be a multiple of MOQ per package size above

For orders equal to or greater than 1000pcs:

Bulk is not an option. Please refer to tape and reel packaging.



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