

CRYSTAS 石英晶振

SMD5032 系列

FEATURES

- High precision characteristics covering up to wide frequency range;
- Higher frequency stability and reliability;
- Excellent for reducing EMI effect;
- The best choice of Bluetooth, wireless communication set, DSC, PDA, mobile phone and USB interface card;
- RoHS Compliant /Pb Free.

特 征

- 高精度特性，可覆盖宽频率范围；
- 更高的频率稳定性和可靠性；
- 具有良好的电磁干扰效果；
- 蓝牙、无线通讯设备、数码相机、掌上电脑、手机和 USB 接口卡的最佳选择；
- 符合 RoHS 标准/无铅。

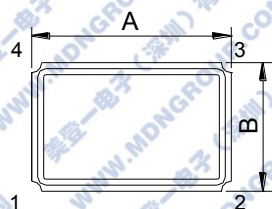
CRYSTALS SPECIFICATIONS

ITEMS (项目)	PARAMETERS (规格说明)
Frequency Range	8~125MHz
Frequency Tolerance(at 25℃)	±30ppm, or specify
Frequency Stability Over Operating Temperature Range	±30ppm, or specify
Operating Temperature Range	-10~+70℃, or specify
Shunt Capacitance(C0)	5pF Max.(2pF typical)
Drive Level	~200 μW (100 μW typical)
Load Capacitance	10pF, 16pF, 20pF, or specify
Aging(at 25℃)	±3ppm/year Max, or specify
Storage Temperature Range	-40~+85℃

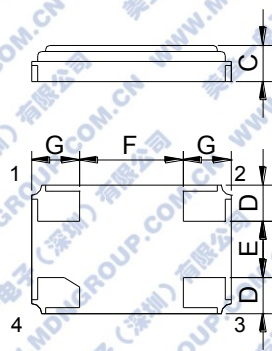
Equivalent Series Resistance(ESR)

Fundamental	
8~11MHz	80 Ω Max
12~54MHz	40 Ω Max
40~60MHz	120 Ω Max
60~125MHz	80 Ω Max

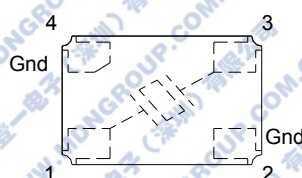
DIMENSIONS(Unit:mm) AND SHAPES



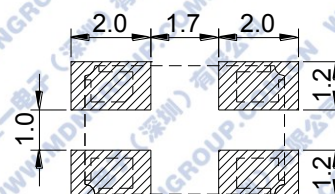
A	5.0±0.15	E	1.4±0.15
B	3.2±0.15	F	2.6±0.15
C	0.9±0.15	G	1.2±0.15
D	0.9±0.15	H	



Top View Crystal Connection



Top View Suggested Layout



CRYSTAS 石英晶振

SMD3225 系列

FEATURES

- High precision characteristics covering up to wide frequency range;
- Higher frequency stability and reliability;
- Excellent for reducing EMI effect;
- The best choice of Bluetooth, wireless communication set, DSC, PDA, mobile phone and USB interface card;
- RoHS Compliant /Pb Free.

特 征

- 高精度特性，可覆盖宽频率范围；
- 更高的频率稳定性和可靠性；
- 具有良好的电磁干扰效果；
- 蓝牙、无线通讯设备、数码相机、掌上电脑、手机和 USB 接口卡的最佳选择；
- 符合 RoHS 标准/无铅。

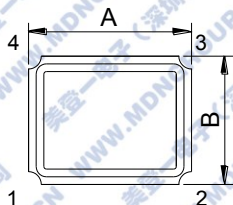
CRYSTALS SPECIFICATIONS

ITEMS (项目)	PARAMETERS (规格说明)	
Frequency Range	10~114MHz	100~400MHz
Drive Level	1~200 μ W	400 μ W Max
Frequency Tolerance(at 25℃)	± 30 ppm, or specify	
Frequency Stability Over Operating Temperature Range	± 30 ppm, or specify	
Operating Temperature Range	-10~+70℃, or specify	
Shunt Capacitance(C0)	3pF Max.	
Load Capacitance	10pF, or specify	
Aging(at 25℃)	± 3 ppm/year Max, or specify	
Storage Temperature Range	-40~+85℃	

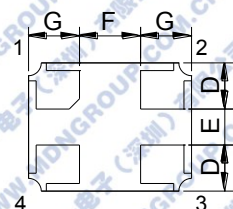
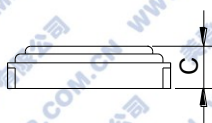
Equivalent Series Resistance(ESR)

Fundamental	
10~16MHz	100 Ω Max
16~20MHz	80 Ω Max
20~64MHz	60 Ω Max
100~400MHz	30 Ω Max

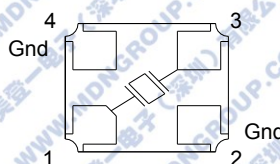
DIMENSIONS(Unit:mm) AND SHAPES



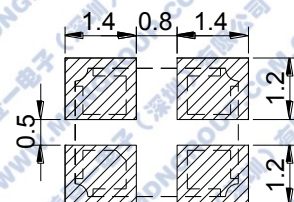
A	3.2 ± 0.10	E	0.7 ± 0.10
B	2.5 ± 0.10	F	1.2 ± 0.10
C	0.7 ± 0.10	G	1.0 ± 0.10
D	0.9 ± 0.10	H	



Top View Crystal Connection



Top View Suggested Layout



CRYSTAS 石英晶振

SMD2520 系列

FEATURES

- High precision characteristics covering up to wide frequency range;
- Higher frequency stability and reliability;
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- RoHS Compliant /Pb Free.

特 征

- 高精度特性，可覆盖宽频率范围；
- 更高的频率稳定性和可靠性；
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- 蓝牙、无线通讯设备、数码相机、掌上电脑、手机和 USB 接口卡的最佳选择；
- 符合 RoHS 标准/无铅。

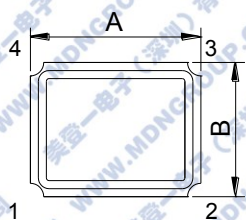
CRYSTALS SPECIFICATIONS

ITEMS (项目)	PARAMETERS (规格说明)
Frequency Range	12~30MHz
Drive Level	10 μ W (100 μ W Max)
Frequency Tolerance(at 25℃)	± 10 ppm, ± 30 ppm, or specify
Frequency Stability Over Operating Temperature Range	± 10 ppm, ± 30 ppm, or specify
Operating Temperature Range	-10~+70℃, or specify
Shunt Capacitance(C0)	3pF Max.
Load Capacitance	8pF, 10pF, 12pF, or specify
Aging(at 25℃)	± 3 ppm/year Max, or specify
Storage Temperature Range	-40~+85℃

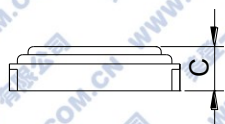
Equivalent Series Resistance(ESR)

Fundamental	
12~13MHz	150 Ω Max
14~24MHz	100 Ω Max
24~30MHz	80 Ω Max

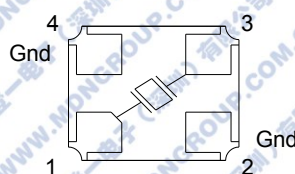
DIMENSIONS(Unit:mm) AND SHAPES



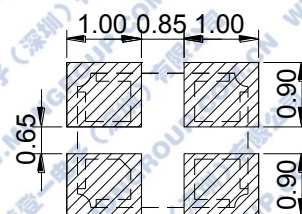
A	2.5 $\pm$ 0.10	E	0.7 $\pm$ 0.10
B	2.0 $\pm$ 0.10	F	0.9 $\pm$ 0.10
C	0.55 Max	G	0.8 $\pm$ 0.10
D	0.65 $\pm$ 0.10	H	



Top View Crystal Connection



Top View Suggested Layout



CRYSTAS 石英晶振

SMD2016 系列

FEATURES

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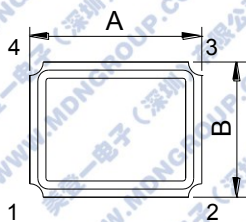
特 征

- 高精度特性，可覆盖宽频率范围；
- 更高的频率稳定性和可靠性；
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- 符合 RoHS 标准/无铅。

CRYSTALS SPECIFICATIONS

ITEMS (项目)	PARAMETERS (规格说明)
Frequency Range	16~19.2MHz
Equivalent Series Resistance	200 Ω Max
Drive Level	10 μ W (100 μ W Max)
Frequency Tolerance(at 25 $^{\circ}$ C)	± 10 ppm, ± 20 ppm, or specify
Frequency Stability Over Operating Temperature Range	± 10 ppm, ± 20 ppm, or specify
Operating Temperature Range	-10~+70 $^{\circ}$ C , or specify
Shunt Capacitance(C0)	3pF Max.
Load Capacitance	8pF, 10pF, 12pF, or specify
Aging(at 25 $^{\circ}$ C)	± 3 ppm/year Max, or specify
Storage Temperature Range	-40~+85 $^{\circ}$ C

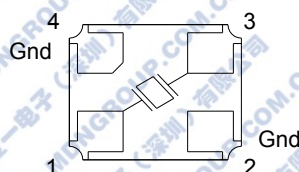
DIMENSIONS(Unit:mm) AND SHAPES



A	2.00 $\pm$ 0.10	E	0.55 $\pm$ 0.10
B	1.60 $\pm$ 0.10	F	0.70 $\pm$ 0.10
C	0.50 Max	G	0.65 $\pm$ 0.10
D	0.50 $\pm$ 0.10	H	



Top View Crystal Connection



Top View Suggested Layout

