

Most common SMT components footprint details

1) 1206 :

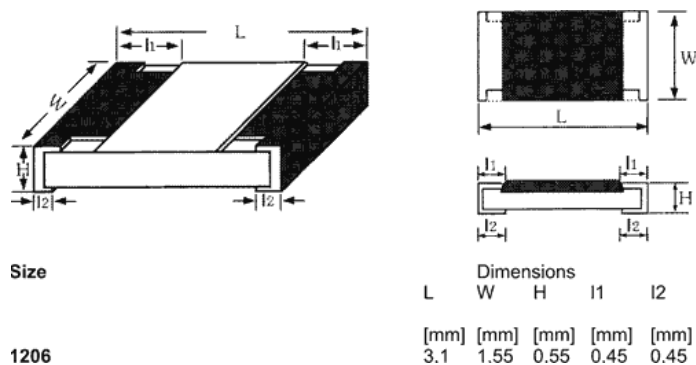
Description :

Length: 3.2 mm

Width: 1.6 mm

Height: 0.55 mm This will vary depending on the specific component.

Image :



2) SOIC- 8 Narrow :

Description :

Length: 4.80-5.00mm

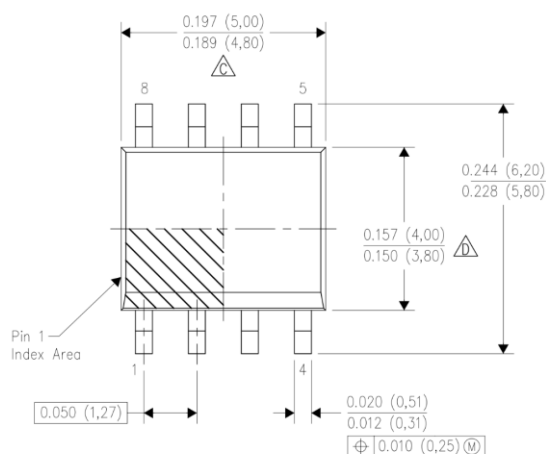
Body Width: 3.80-4.00mm

Total Width: 5.80-6.20mm

Height: 1.27mm

Pitch: 1.27mm

Image :



3) SMA (DO-214AC) Diode :

Description :

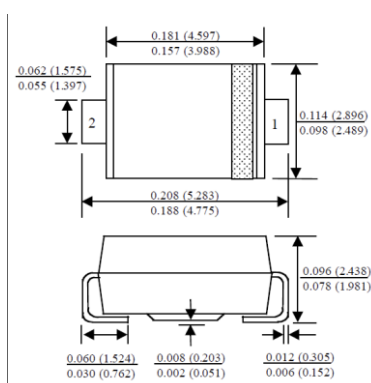
Body Length: 3.988-4.597mm

Total Length: 4.775-5.283mm

Width: 2.489-2.896mm

Height: 1.981-2.438mm

Image :



4) SOT-23 :

Description :

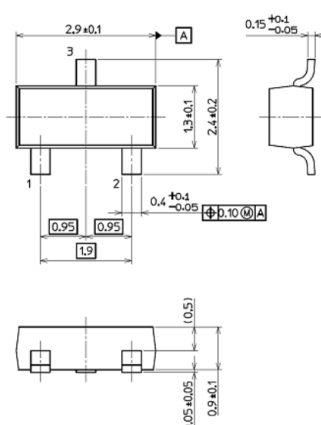
Length: 2.9mm

Body Width: 1.3mm

Total width: 2.4mm

Height: 0.9mm

Image :



5) SOD-323 :

Description :

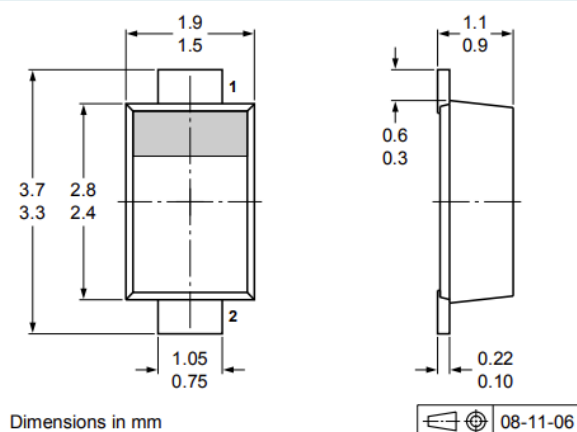
Body Length: 2.4-2.8mm

Total Length: 3.3-3.7mm

Width : 1.5-1.9mm

Height: 0.9-1.1mm

Image :



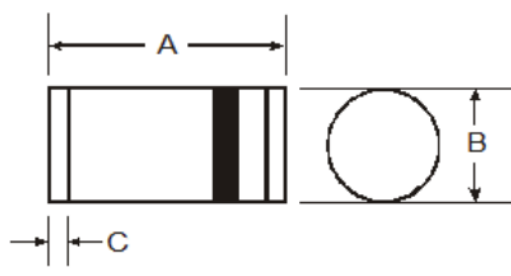
6) MELF :

Description :

Length: 4.80-5.20mm

Diameter: 2.40-2.60mm

Image :



MELF

MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Typ	
All Dimensions in mm		

7) SOP-8 :

Description :

Length: 5.5mm

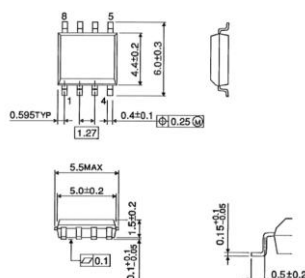
Body width: 4.4mm

Total Width : 6mm

Height: 1.5mm

Pitch: 1.27mm

Image :



8) QFN-64 :

Description :

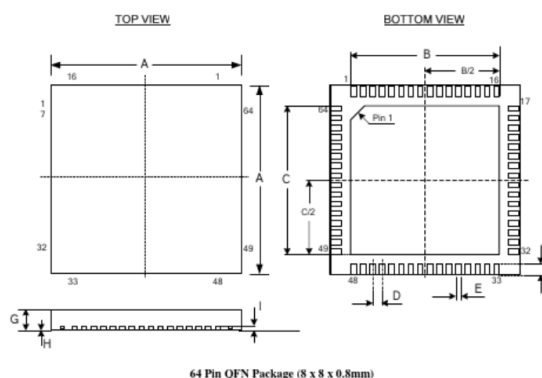
Length: 8mm

Width : 8mm

Height: 0.7-0.8mm

Pitch: 0.4mm

Image :



64 Pin QFN Package (8 x 8 x 0.8mm)

Table of Dimensions

No. of Leads		SYMBOL								
64 (8 X 8 mm)		A	B	C	D	E	F	G	H	I
Milli- meters	MIN	8	6.1	6.1	0.4	0.15	0.35	0.7	0	0.203
	MAX		6.3	6.3		0.25	0.45	0.8	0.05	

9) BGA :

Description :

Length: 9mm

Width : 11mm

Height: 1mm

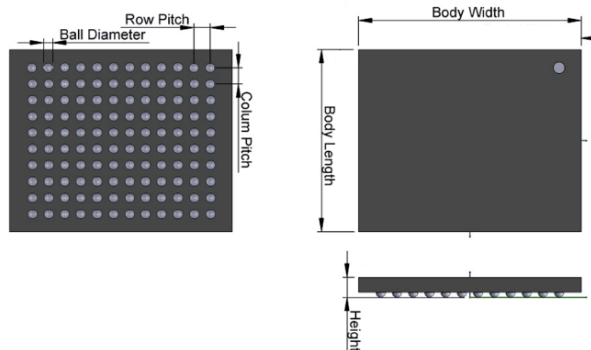
Pitch: 0.8mm

Image :

BGA120C80P10X12_900X1100X100

BGA = Ball Grid Array's, Surface mount package
120C – Pin Qty = 120 collapsible balls
80P – Pitch = 0.8mm

10X12 – 12 rows, 10 columns
900X1100 – Body Length = 9.00mm
1100 – Body Width = 11.00mm
100 – Body Height = 1.00mm



10) Tantalum Capacitor :

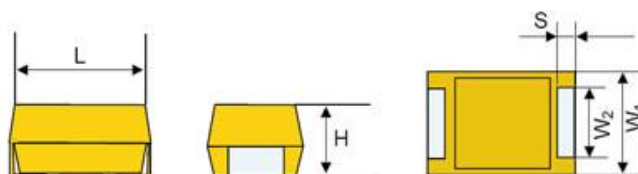
Description :

Length: 3.5mm

Width : 2.8mm

Height: 1.9mm

Image :



$$\begin{aligned} L &= 3.5 \pm 0.2 \\ W_1 &= 2.8 \pm 0.2 \\ H &= 1.9 \pm 0.2 \\ S &= 0.8 \pm 0.3 \\ W_2 &= 2.2 \pm 0.1 \end{aligned}$$

11) Electrolytic capacitor 8X10.2 :

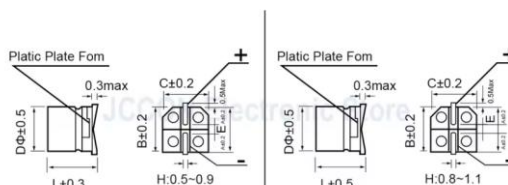
Description :

Diameter : 8mm

Height : 10.2mm



Image :



Drawing (Unit:mm)

Size	Φ4X5.4	Φ5X5.4	Φ6.3X5.4	Φ6.3X7.7	Φ8X6.5	Φ8X10.2	Φ10X10.2
A	1.8	2.1	2.4	2.4	2.9	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1(2.2)	3.1	4.5
L	5.4	5.4	5.4	7.7	6.5	10.2	10.2
H			0.5-0.9			0.8-1.1	

12) TSOP-20 :

Description :

Length: 6.9mm

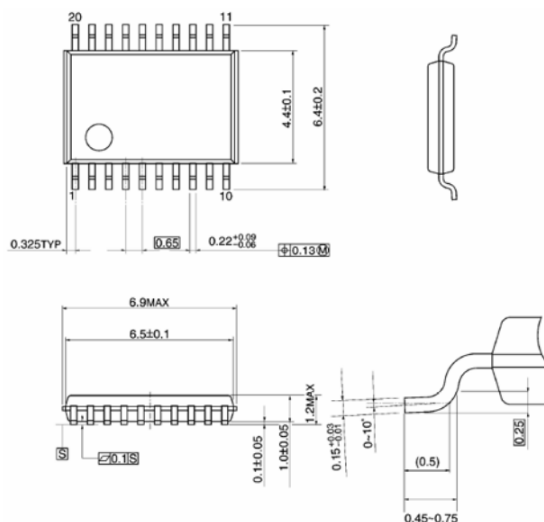
Body width: 4.4mm

Width : 6.4mm

Height: 1.2mm

Pitch: 0.65mm

Image :



13) Feedthrough Capacitor 1812 :

Description :

Length: 4.5mm

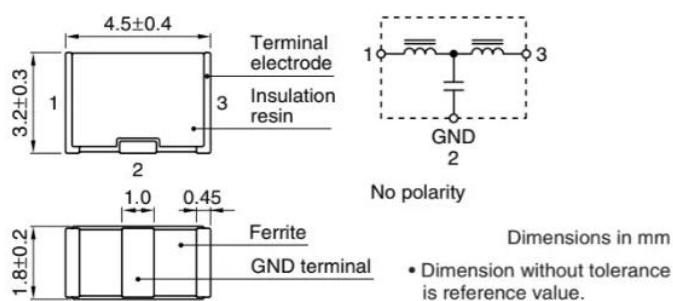
Width : 3.2mm

Height: 1.8mm

ACH4518 TYPE

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

Image :



14) DPAK :

Description :

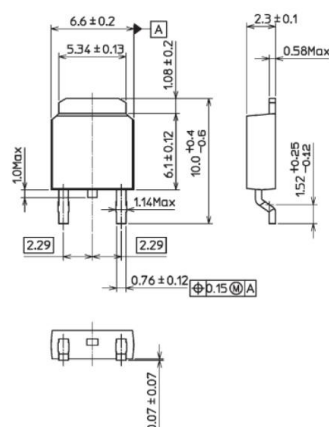
Length: 10mm

Width : 6.6mm

Height: 2.3mm

Pitch : 2.29mm

Image :



15) TQFP-48 :

Description :

Body Length: 7mm

Total Length: 9mm

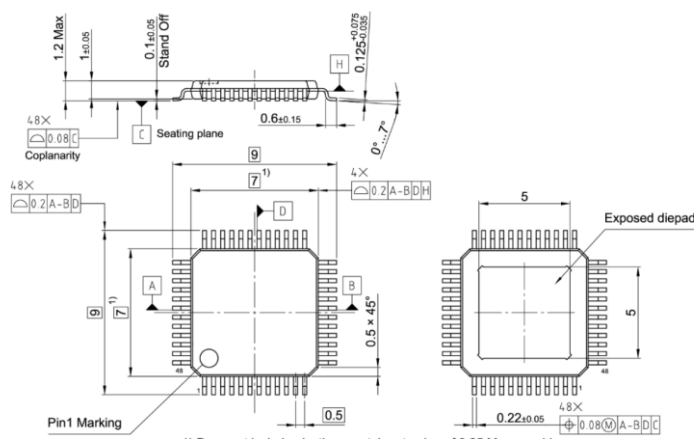
Body Width : 7mm

Total Width : 9mm

Height: 1.2mm

Pitch : 0.5mm

Image :



16) 4-Pin SMD Oscillator :

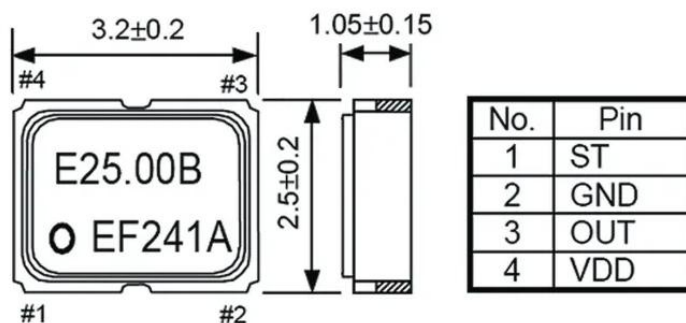
Description :

Length: 3.2mm

Width : 2.5mm

Height: 1.05mm

Image :



17) SON-8 :

Description :

Length: 2.9mm

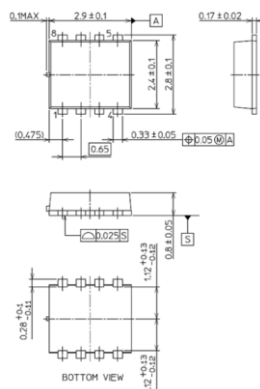
Body Width : 2.4mm

Total Width : 2.8mm

Height: 0.8mm

Pitch : 0.65mm

Image :



18) VSON-8 :

Description :

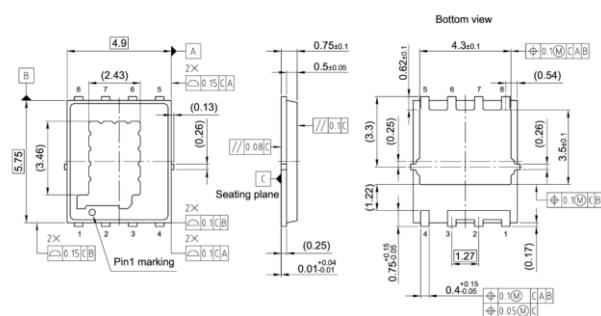
Length: 5.75mm

Width : 4.9mm

Height: 0.75mm

Pitch : 1.27mm

Image :



All dimensions are in units mm
The drawing is in compliance with ISO 128-30, Projection Method 1 [1st angle]
Drawing according to ISO 8015, general tolerances ISO 2768-mK

19) PLCC-32 :

Description :

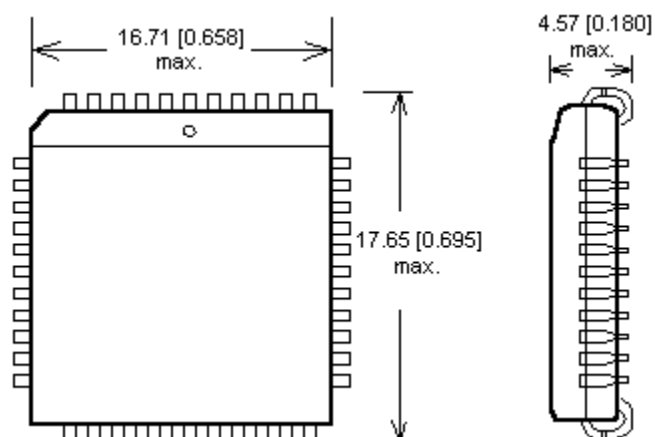
Length: 16.71mm

Width : 17.65mm

Height: 4.57mm

Pitch: 1.27mm

Image :



20) DFN-8 :

Description :

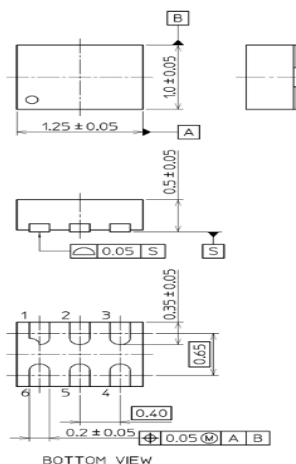
Length: 1.25mm

Width : 1mm

Height: 0.5mm

Pitch: 0.4mm

Image :



21) 0805 :

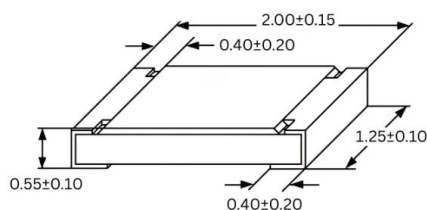
Description :

Length: 2mm

Width: 1.25mm

Height: 0.55mm This will vary depending on the specific component.

Image :



22) 0603 :

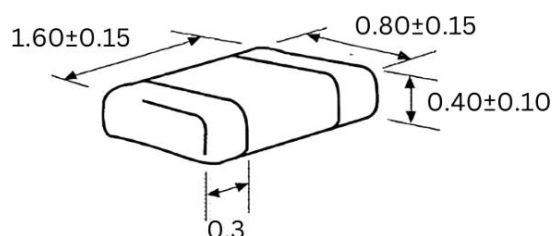
Description :

Length: 1.60mm

Width: 0.80mm

Height: 0.4mm This will vary depending on the specific component.

Image :



23) 0402 :

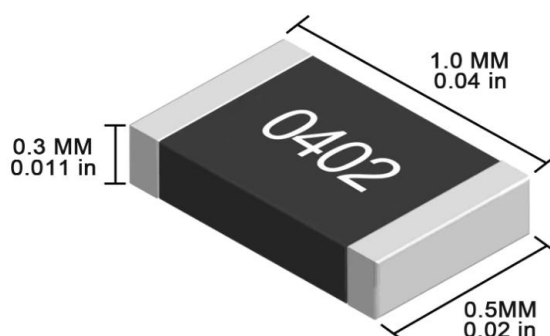
Description :

Length: 1mm

Width: 0.5mm

Height: 0.3mm This will vary depending on the specific component.

Image :



24) 0201 :

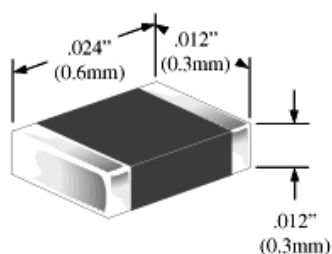
Description :

Length: 0.6mm

Width: 0.3mm

Height: 0.3mm This will vary depending on the specific component.

Image :



25) WSON-8 :

Description :

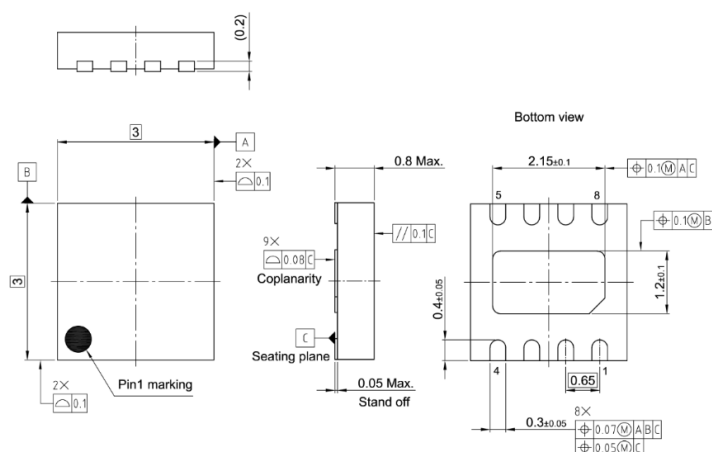
Length: 3mm

Width: 3mm

Height: 0.8mm

Pitch: 0.65mm

Image :



All dimensions are in units mm
The drawing is in compliance with ISO 128-30, Projection Method 1 []
Drawing according to ISO 8015, general tolerances ISO 2768-mK