

# COMPONENT IDENTIFICATION

## Leadless



SMD Capacitor



Tantalum SMD Capacitor



MELF Resistor



LED Diode



SMD Crystal



SMD Resistor

## Chip Size

comparison	Metric Code	Imperial Code	comparison
	0402	01005	
1x1mm	0603	0201	
	1005	0402	
	1608	0603	
	2012	0805	
	2520	1008	
	3216	1206	
	3225	1210	
	4516	1806	
1x1mm	4532	1812	0.1x0.1 in (100x100 mils)
	5025	2010	
	6332	2512	0.5x0.5 in (500x500 mils)

Actual Size

## Leaded



QFP

QFP 32	QFP 128
44	144
48	160
64	176
80	208
100	256
120	240



DPAK



SOIC

SOIC 4
8
14
16
20
24
28
32



PLCC

PLCC 20
22
28
32
44
68
84

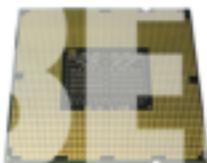


SOT 23



SOD

LGA

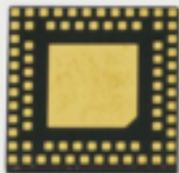
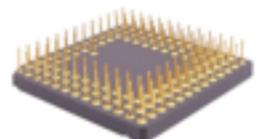


TOP VIEW  
QFN Single Row

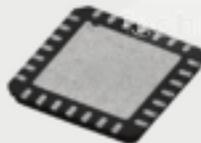


TOP VIEW  
Plastic BGA

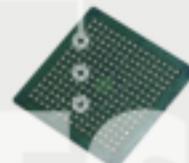
Pin Grid Array



QFN Dual Row



BOTTOM VIEW  
QFN Single Row



BOTTOM VIEW  
Plastic BGA



Metal BGA

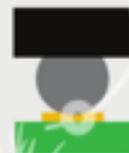
## Mounting Styles



Castellated



Flat No-Lead



Ball Grid Array



Gull Wing



Butt / I Lead



Inward formed  
L-shaped Ribbon Lead



J-Lead

## Leadless

## Leaded