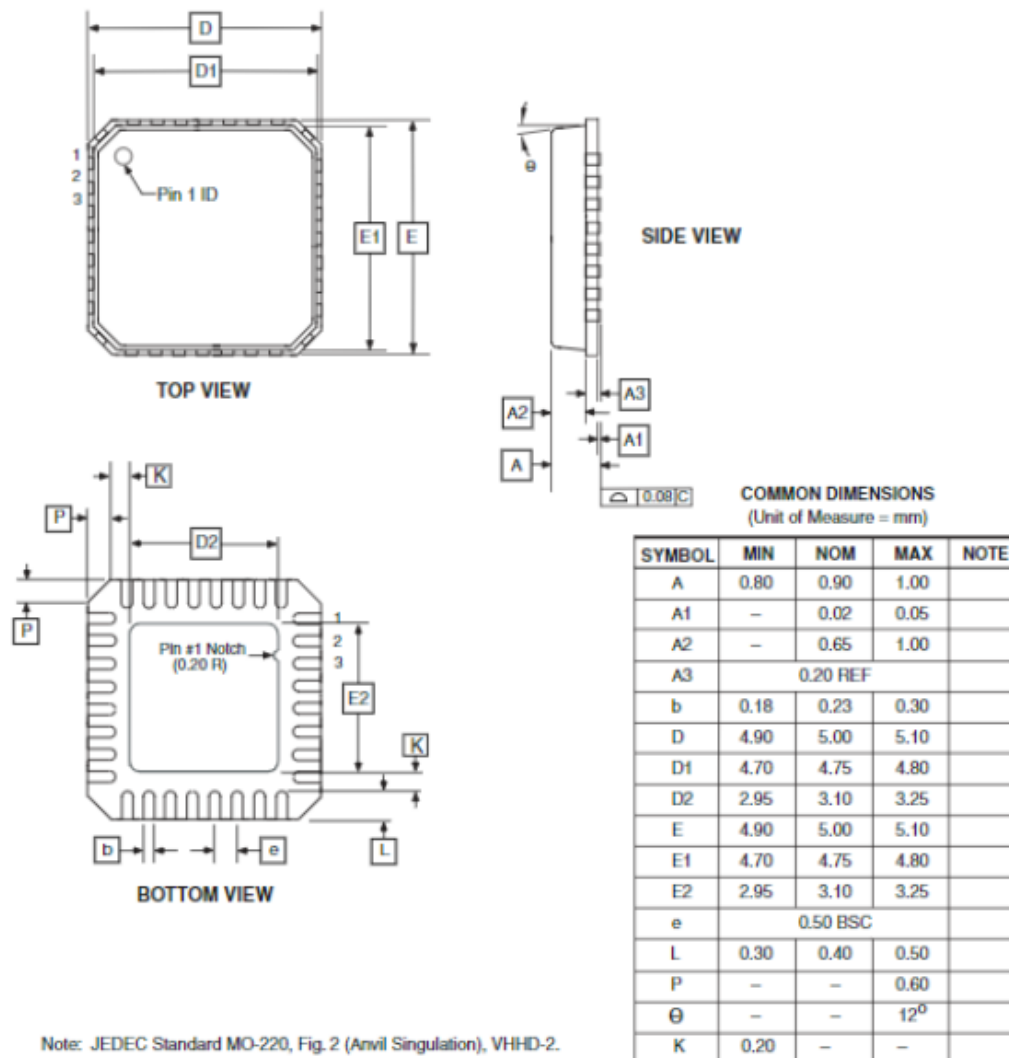


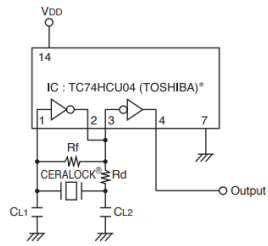
## Device footprints

I have researched each component footprints for this project, below are all the different footprints that I have used in my PCB design:




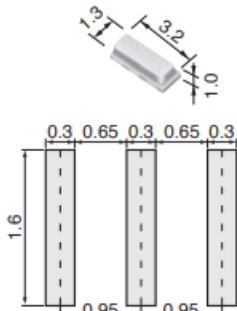
IC : TC74HCU04 (TOSHIBA)®

• 60.01 ~ 70.00MHz : SN74AHCU04(TI)



\* 60.01—70.00MHz : SN74AHCU04(TI)

Item Part Number	Frequency Range	V <sub>DD</sub>	Circuit Constant			
			C <sub>L1</sub>	C <sub>L2</sub>	R <sub>f</sub>	R <sub>d</sub>
CSTLS□G56	3.40~10.00MHz	+5V	(47pF)	(47pF)	1MΩ	680Ω
CSTLS□X	16.00~ 19.99MHz	+3V	(5pF)	(5pF)	1MΩ	470Ω
		+5V	(15pF)	(15pF)	1MΩ	220Ω
		+5V	(22pF)	(22pF)	1MΩ	0
		+5V	(33pF)	(33pF)	1MΩ	0
	20.00~ 25.99MHz	+3V	(5pF)	(5pF)	1MΩ	0
		+5V	(15pF)	(15pF)	1MΩ	0
		+5V	(22pF)	(22pF)	15KΩ	0
		+5V	(33pF)	(33pF)	4.7KΩ	0
	26.00~ 32.99MHz	+5V	(5pF)	(5pF)	1MΩ	0
		+5V	(15pF)	(15pF)	15KΩ	0
		+5V	(22pF)	(22pF)	4.7KΩ	0
		+5V	(33pF)	(33pF)	3.3KΩ	0
	33.00~ 50.00MHz	+5V	(5pF)	(5pF)	1MΩ	0
		+5V	(15pF)	(15pF)	15KΩ	0

<p>CSTCE  V<sup>2</sup></p>	<p>14.00–20.00</p>	
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## 5. Package Parameters

The FT232R is supplied in two different packages. The FT232RL is the SSOP-28 option and the FT232RQ is the QFN-32 package option. The solder reflow profile for both packages is described in [Section 5.3](#).

### 5.1 SSOP-28 Package Dimensions

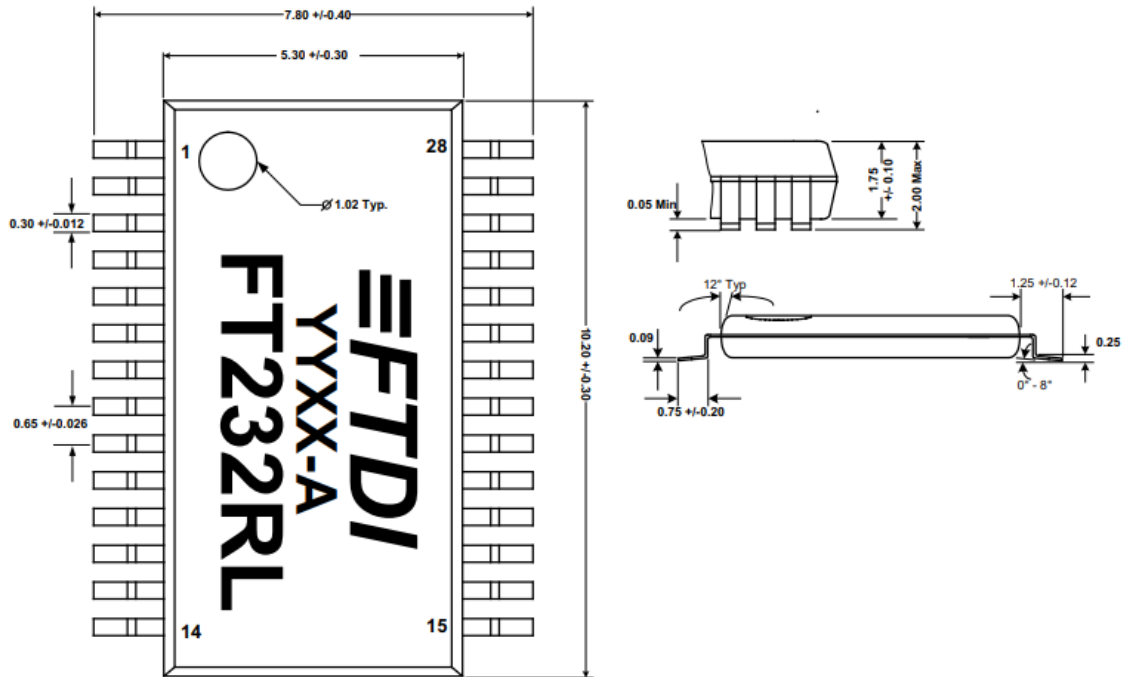
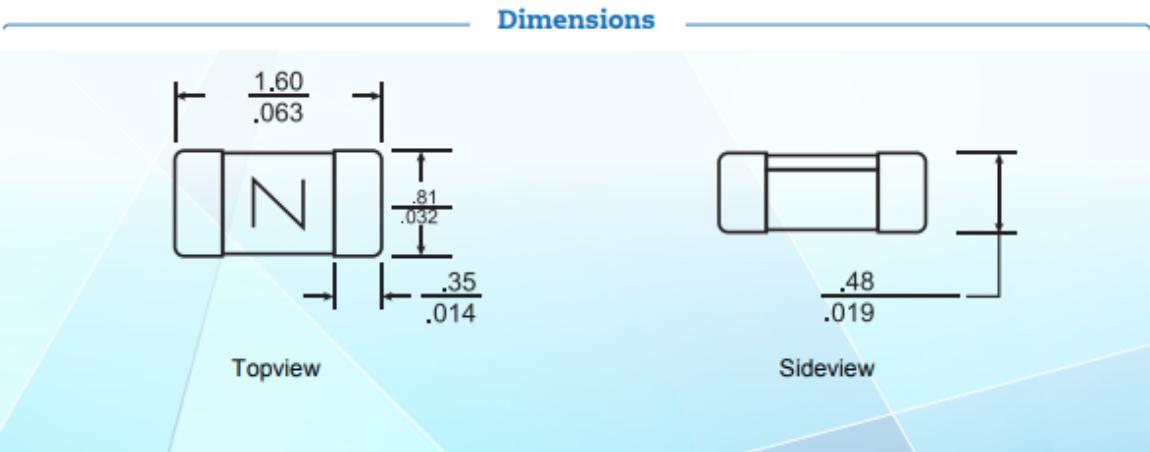


Figure 6 - SSOP-28 Package Dimensions

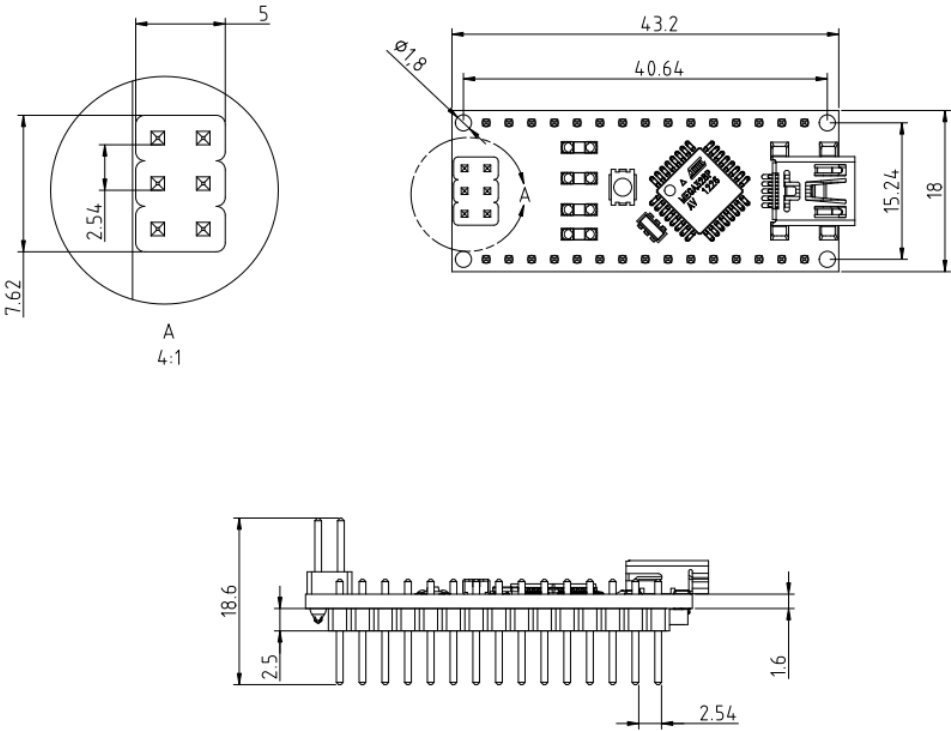
Fuse

Electrical Characteristics		
Rated Current	1.0In	2.0In
250mA~8A	4 hour min.	60 sec maximum

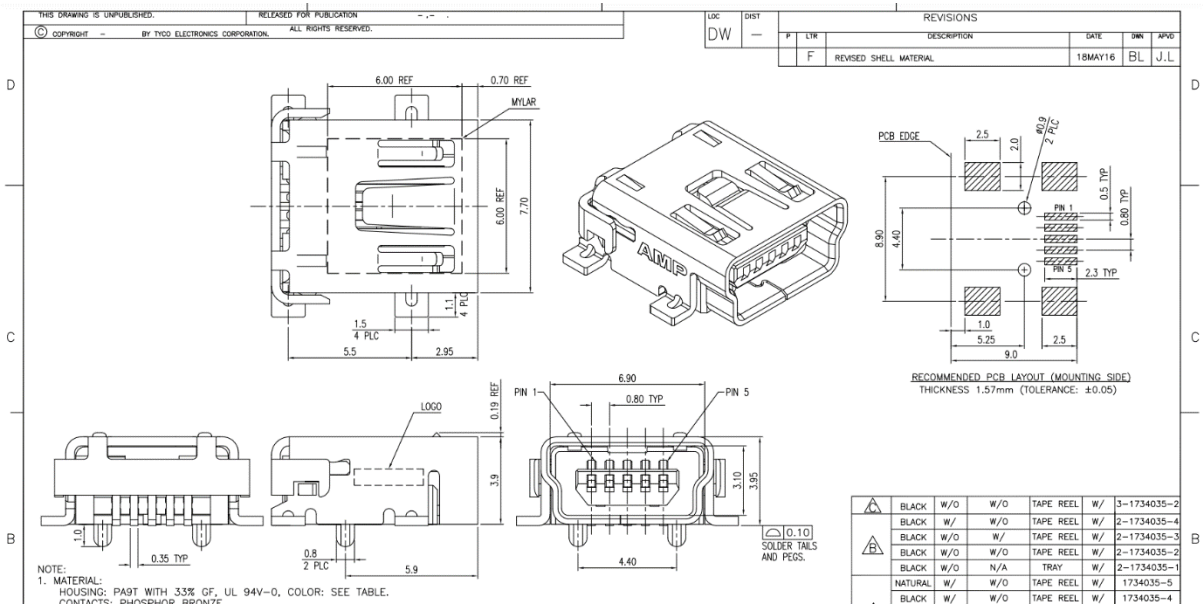


Pin out

ARDUINO  
NANO  
Size



Usb



Capacitor

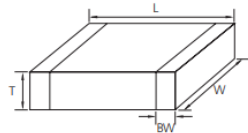
Highly reliable tolerance and high speed automatic chip placement on PCBs

- Wide capacitance range
- Wide temperature compensation and voltage range : from COG to Y5V and from 6.3V to 50V
- Highly reliable performance
- Highly resistant termination metal
- Tape & reel for surface mount assembly

Application

- HHP, DSC, DVC, LCD, TV, Memory Module, PDA, Game Machine
- Desktop PC, Note PC, HHP, DC-DC Converter, DSC
- Tuner (Product code C is suitable.)

Structure and Dimensions

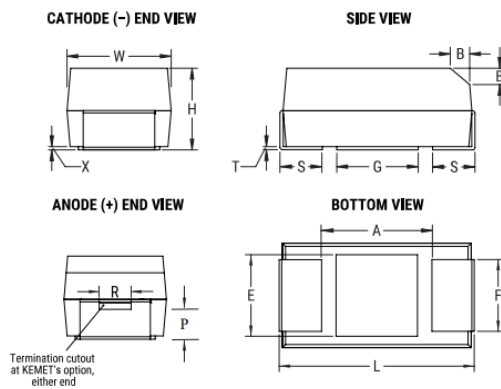


Size Code	EIA Code	Dimension(mm)				BW
		L	W	T	Thickness Code	
05	0402	1.00±0.05	0.50±0.05	0.50±0.05	5	0.25±0.10
10	0603	1.60±0.10	0.80±0.10	0.50±0.0/-0.1(+)	5	0.30±0.20
		1.60±0.10	0.80±0.10	0.80±0.10	8	
21	0805	2.00±0.10	1.25±0.10	0.85±0.10	C	0.5±0.2/-0.3
		2.00±0.10	1.25±0.10	1.15±0.10	M	
		2.00±0.10	1.25±0.10	1.25±0.10	F	
		2.00±0.15	1.25±0.15	1.25±0.15	Q	
		2.00±0.20	1.25±0.20	1.25±0.20	Y	
31	1206	3.20±0.20	1.60±0.20	0.60±0.10(+)	6	0.50±0.30
		3.20±0.15	1.60±0.15	0.85±0.15	C	
		3.20±0.20	1.60±0.20	0.85±0.10(+)	C	
		3.20±0.20	1.60±0.20	1.15±0.10(+)	P	
		3.20±0.15	1.60±0.15	1.25±0.15	F	
32	1210	3.20±0.20	1.60±0.20	1.60±0.20	H	0.60±0.30
		3.20±0.30	2.50±0.20	0.85±0.10(+)	C	
		3.20±0.30	2.50±0.20	0.90±0.10(+)	9	
		3.20±0.30	2.50±0.20	1.60±0.20	H	
		3.20±0.30	2.50±0.20	1.80±0.20(+)	U	
42	1808	3.20±0.30	2.50±0.20	2.00±0.20	I	0.80±0.30
		3.20±0.30	2.50±0.20	2.50±0.20	J	
		3.20±0.40	2.50±0.30	2.50±0.30	V	
		4.50±0.40	2.00±0.20	1.25±0.20	F	
		4.50±0.40	2.00±0.20	1.40±0.20	G	
43	1812	4.50±0.40	2.00±0.20	2.00±0.20	I	0.80±0.30
		4.50±0.40	3.20±0.30	1.25±0.20	F	
		4.50±0.40	3.20±0.30	2.50±0.20	J	
		4.50±0.40	3.20±0.30	3.20±0.30	L	

Capacitor 4.7uF

KEMET Part Number: T491A475K016AT

T491, Tantalum, MnO2 Tantalum, 4.7 uF, 10%, 16 VDC, SMD, MnO2, Molded



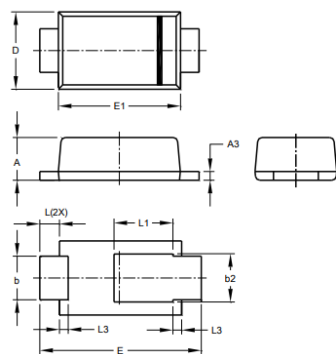
Diode



DFLS1100

Package Outline Dimensions

Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.

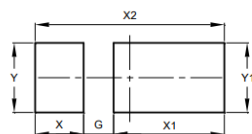


POWERDI <sup>®</sup> 123			
Dim	Min	Max	Typ
A	0.93	1.00	0.98
A3	0.15	0.25	0.20
b	0.85	1.25	1.00
b2	1.025	1.125	1.10
D	1.63	1.93	1.78
E	3.50	3.90	3.70
E1	2.60	3.00	2.80
L	0.40	0.50	0.45
L1	1.25	1.40	1.35
L3	0.125	0.275	0.20

All Dimensions in mm

Suggested Pad Layout

Please see AP02001 at <http://www.diodes.com/datasheets/ap02001.pdf> for the latest version.



Dimensions	Value (in mm)
G	0.65
X	1.05
X1	2.40
X2	4.10
Y	1.50
Y1	1.50