# **Assortments & Kits**

# multicomp PRO

RoHS

**Compliant** 

### Multilayer Ceramic Capacitor, 0.1µF, 100V, ±20%, Radial Leaded, Z5U

02B642

#### Specifications

Capacitance: 0.1µFVoltage Rating: 100VCapacitance Tolerance: ± 20%Capacitor Terminals: Radial LeadedDielectric Characteristic: Z5ULead Spacing: 2.54mmOperating Temperature: 10°C to +85°C

### Multilayer Ceramic Capacitor, 10000pF, 50V, ±10%, Radial Leaded, X7R



97M4158

#### **Specifications**

Capacitance	: 10000pF
Voltage Rating	: 50V
Capacitance Tolerance	: ± 10%
Capacitor Terminals	: Radial Leaded
Dielectric Characteristic	: X7R
Lead Spacing	: 2.54mm
Operating Temperature Min	: -55°C
Operating Temperature Max	: 125°C

### Electrolytic Capacitor, 10 µF, 25V, ±20%, Radial Leaded, 1000 hours @ 85°C



#### **Specifications**

Capacitance	: 10µF
Voltage Rating	: 25V
Capacitance Tolerance	: ± 20%
Capacitor Terminals	: Radial Leaded
Lifetime @ Temperature	: 1000 hours @ 85°C
Polarity	: Polar
Diameter	: 4mm
Lead Spacing	: 1.5mm
Height	: 7mm
Operating Temperature	: -40°C to +85°C



# Electrolytic Capacitor, 100µF, 35V, ±20%, Radial Leaded, 2000 hours @ 85°C

#### Features

100 JF	100	
	100	

96K9198

- Capacitance value ranges from 2.2µF to 22000µF for 6.3V DC to 100V DC
- Capacitance value ranges from 1µF to 470µF for 160VDC to 450VDC
- Automotive grade AEC-Q200 compliant
- Tolerance of ±20%
- Endurance of 2000h at 85°C
- Available in -40°C to 85°C and -25°C to 85°C temperature ranges based on rated voltage
- High reliability

# Specifications

Capacitance	: 100µF
Voltage Rating	: 35V
Capacitance Tolerance	: ± 20%
Capacitor Terminals	: Radial Leaded
Lifetime @ Temperature	: 2000 hours @ 85°C
Polarity	: Polar
Diameter	: 6.3mm
Lead Spacing	: 2.5mm
Height	: 11.2mm
Operating Temperature Min	: -40°C
Operating Temperature Max	: 85°C

# Multilayer Ceramic Capacitor, 1µF, 50V, ±20%, Radial Leaded, X7R



#### Features

- · High capacitance with small size
- High reliability

### **Specifications**

Capacitance	: 1µF
Voltage Rating	: 50V
Capacitance Tolerance	: ± 20%
Capacitor Terminals	: Radial Leaded
Dielectric Characteristic	: X7R
Lead Spacing	: 5mm
Operating Temperature Min	: -55°C
Operating Temperature Max	: 125°C



# Infrared Emitter, 950nm, 15 Deg., T-1 3/4 (5mm), 800mW/Sr, 800ns



Peak Wavelength	: 950nm
Angle of Half Intensity	: 15°
Diode Case Style	: T-1 3/4 (5mm)
Radiant Intensity (le)	: 800mW/Sr
Rise Time	: 800ns
Fall Time tf	: 800ns
Forward Current If(AV)	: 100mA
Forward Voltage VF Max	: 1.3V
Operating Temperature Min	: -40°C
Operating Temperature Max	: 85°C

# 140 Pc. Jumper Wire Kit, 22 AWG, Solid, Insulated, Assorted Lengths and Colours, Pre-Stripped, Case

**Specifications** 



10R0134

### Description

The Global Specialties Wire Kit contains 140 pre-cut, prestripped and pre-formed #22 gauge insulated solid hook-up wires. The product comes in a compartmentalized plastic case and each group of wires are individually wrapped to prevent mix-ups in shipping.

### **Specifications**

Wire Gauge	: 22AWG
Jacket Color	: Multi-colored
Kit Contents	: 140Pcs of Jumper Wires in Assorted Lengths

# LED, Red, Through Hole, T-1 3/4 (5mm), 10mA, 2.1V, 650nm



#### **Specifications**

LED Colour	: Red
LED Mounting	: Through Hole
LED Case Size	: T-1 3/4 (5mm)
Forward Current If	: 10mA
Forward Voltage	: 2.1V
Wavelength Typ	: 650nm
Luminous Intensity	: 2.8mcd
Viewing Angle	: 45 Deg.
Lens Shape	: Round

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro



13/08/21 V1.0

# multicomp PRO

# Operational Amplifier, Dual, 1MHz, 2, 0.6V/ s, 1.8V to 6V, DIP, 8 pin



#### **Specifications**

No. of Amplifiers	: 2 Amplifier
Bandwidth	: 1MHz
Slew Rate	: 0.6V/µs
Supply Voltage Range	: 1.8V to 6V
Amplifier Case Style	: DIP
No. of Pins	: 8Pins
Operating Temperature Min	: -40°C
Operating Temperature Max	: 85°C
Automotive Qualification Standard	: AEC-Q100
MSL	: MSL 1 - Unlimited

## Phone Audio Connector, Jack, 3.5mm, Silver Plated Contacts, Plastic Body



#### Features

- Silver-plated phosphor bronze springs
- Silver-plated TiCu tip
- 30mΩ contact resistance
- 500VAC dielectric strength
- 5000-cycle operating life

11M0543

### **Specifications**

Gender	
Pin Diameter	
Contact Plating	
Connector Body Material	

: Jack : 3.5mm

- : Silver Plated Contacts
- : Plastic Body

# Photodiode, 20 Deg., 150pA, 950nm, T-1 (3mm)

#### **Features**

- · High radiant sensitivity
- Fast response times

### **Specifications**

115	Specifications		
20	No. of Pins	: 2Pins	
82T8676	Diode Case Style	: T-1 (3mm)	
	Wavelength of Peak Sensitivity	: 950nm	
	Angle of Half Sensitivity ±	: 20°	
	Dark Current	: 150pA	
	Operating Temperature Min	: -40°C	
	Operating Temperature Max	: 100°C	

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# Trimpot, Single Turn, Cermet, Top Adjust, 10kΩ, Through Hole, 1 Turns



## **Specifications**

Trimpot Type	: Single Turn
Element Material	: Cermet
Adjustment Type	: Top Adjust
Track Resistance	: 10kΩ
Potentiometer Mounting	: Through Hole
No. of Turns	: 1Turns
Power Rating	: 500mW
Resistance Tolerance	: ± 10%
Temperature Coefficient	: ± 100ppm/°C
Trimpot Shape / Size	: 1/4 Inch Square

## NTC Thermistor, 10kΩ, Radial Leaded



#### Features

- Accuracy over a wide temperature range
- High stability over a long life
- 500mW Power dissipation
- 500mW Maximum power dissipation (at 55°C)

#### **Specifications**

: 10kΩ
: Through Hole
: 3977K
: Radial Leaded
: -40°C
: 125°C

### Bipolar (BJT) Single Transistor, NPN, 30V, 500mW, 800mA, 100hFE



#### **Specifications**

Transistor Polarity	: NPN
Collector Emitter Voltage V(br)ceo	: 30V
DC Collector Current	: 800mA
Power Dissipation Pd	: 500mW
Transistor Case Style	: TO-18
Transistor Mounting	: Through Hole
No. of Pins	: 3Pins
Transition Frequency ft	: 250MHz
DC Current Gain hFE	: 100hFE
Operating Temperature Max	: 200°C



# USB 2.0 A Male to USB 2.0 Micro B Male, 1m, Black



#### Specifications

- Connector Type A Connector Type B USB Standard Jacket Material Jacket Colour Cable Length
- : USB Type A Plug : Micro USB Type B Plug : USB 2.0
- : PVC
- : Black
- : 1m (3.28ft)

# Development Board, Arduino Nano, ATmega328 MCU, 14 3.3V I/O, 6 PWM Outputs, USB Mini B



13T9275

#### Features

- Microcontroller Atmel ATmega168
- Operating voltage is 5V
- Maximum supply voltage 6 to 20V
- Digital I/O pins 14 (of which 6 provide PWM output)
- DC current per I/O pin 40 mA
- DC current for 3.3V pin 50 mA
- Flash memory16KB of which 2KB is used by Boot loader
- SRAM 1KB, EEPROM 512bytes
- Clock speed 16MHz
- USB Connector type Mini B male



## **Kit Contents**

Order Code	Description	Quantity
02B642	Multilayer Ceramic Capacitor, 0.1µF, 100V, ±20%, Radial Leaded, Z5U	4
97M4158	Multilayer Ceramic Capacitor, 10000pF, 50V, ±10%, Radial Leaded, X7R	4
96K9198	Electrolytic Capacitor, 100µF, 35V, ±20%, Radial Leaded, 2000 hours @ 85°C	2
38K4752	Electrolytic Capacitor, 10µF, 25V, ±20%, Radial Leaded, 1000 hours @ 85°C	2
20J7056	Multilayer Ceramic Capacitor, 1µF, 50V, ±20%, Radial Leaded, X7R	2
88K1272	Infrared Emitter, 950nm, 15 Deg., T-1 3/4 (5mm), 800mW/Sr, 800ns	2
10R0134	140 Pc. Jumper Wire Kit, 22 AWG, Solid, Insulated, Assorted Lengths and Colours, Pre-Stripped, Case	1
14N9418	LED, Red, Through Hole, T-1 3/4 (5mm), 10mA, 2.1V, 650nm	4
26M1280	Operational Amplifier, Dual, 1MHz, 2, 0.6V/ s, 1.8V to 6V, DIP, 8 pin	4
11M0543	Phone Audio Connector, Jack, 3.5mm, Silver Plated Contacts, Plastic Body	1
82T8676	Photodiode, 20 Deg., 150pA, 950nm, T-1 (3mm)	2
62J1882	Trimpot, Single Turn, Cermet, Top Adjust, $10k\Omega$ , Through Hole, 1 Turns	3
98K8278	NTC Thermistor, 10kΩ, Radial Leaded	1
87K2254	Bipolar (BJT) Single Transistor, NPN, 30V, 500mW, 800mA, 100hFE	2
42Y0538	USB 2.0 A Male to USB 2.0 Micro B Male, 1m, Black	1
13T9275	Development Board, Arduino Nano, ATmega328 MCU, 14 3.3V I/O, 6 PWM Outputs, USB Mini B	1

### **Part Number Table**

Description	Part Number
Assortments & Kits	EK307 PACK

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