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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Mueller Engineered Clips & Insulators

OVER 300 VARIETIES IN-STOCK AND READY FOR IMMEDIATE GLOBAL SHIPMENT



GUARANTEED RUGGED, DURABLE & RELIABLE

Mueller's engineered clip designs feature heavy-gauge body, spring and rivet materials. Firm springs and sharp teeth yield clips with a strong "bite and hold" Competitive clips typically found in the market are less robust, poorly stamped, and inconsistently assembled. They often have a shorter life, requiring more frequent replacement. Mueller clips have been tested to 1 million cycles and are designed to last. No shortcuts or cost-saving tricks are used here. Not all clip insulators are the same. Mueller's insulators are specifically designed to fit the clip. Ill-fitting insulators can lead to electrical shocks or difficult clip operation. Mueller clips are offered in steel (plated with a choice of materials), 100% stainless steel, and copper. Over 300 varieties of clips and insulators are in-stock, and ready for immediate global shipment.

Reference Chart for Popular Clips & Insulator Styles

AMPS	JAW OPENING	WIRE ATTACHMENT	USE WITH	WIRE AWG	PLATING	CLIP NUMBER
5	3/16″	Crimp / Solder	BU-32*	20-24	Nickel	BU-30
5	3/16″	Crimp / Solder	BU-31*	18-24	Nickel	BU-30BL
5	3/16″	Crimp / Solder	BU-32*	20-24	Solid Copper	BU-30C
5	3/16″	Threaded	BU-31*	NA	Nickel	BU-30TBO
5	7/32″	Crimp / Solder	BU-36*	20-24	Nickel	BU-34
5	7/32″	Crimp / Solder	BU-36*	20-24	Copper	BU-34C
5	5/16"	Crimp / Solder	BU-47*	16-22	Zinc	BU-45
5	5/16"	Crimp / Solder	BU-72*	16-20	Nickel	BU-70
5	5/16″	Crimp / Screw	BU-72*	16-20	Nickel	BU-70S
5	5/16″	Crimp / Screw	BU-87*	14-20	Zinc	BU-85
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-25182
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-33699
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-33674
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-8078
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-8099
5	1″	Crimp / Screw	JP-8681-*	Up to 10	Nickel / Silver	JP-8783
10	1/4″	Crimp / Screw	Insulated	14-20	Nickel	BU-63
10	1/4″	Crimp / Screw	Insulated	14-20	Solid Copper	BU-63C
10	17/64″	Plug-On	Insulated	NA	Nickel	BU-651-*
10	5/16"	Crimp / Screw	BU-47*	16-22	Solid Copper	BU-45C
10	5/16"	Crimp / Solder / Plug-on	BU-62*	14-20	Nickel	BU-60
10	5/16″	Crimp / Solder / Plug-on	BU-62*	14-20	Solid Copper	BU-60C
10	5/16"	Crimp / Screw	Insul. Barrel	14-20	Solid Copper	BU-60CHS
10	5/16″	Crimp / Screw	BU-62*	14-20	Solid Copper	BU-60CS
10	5/16″	Crimp / Solder	Insul. Barrel	14-20	Nickel	BU-60H
10	5/16"	Crimp / Screw	Insul. Barrel	14-20	Nickel	BU-60HS
10	5/16"	Pin / Prod Tip	Insul. Barrel	NA	Nickel	BU-60HPR
10	5/16"	Pin / Prod Tip	BU-62*	NA	Nickel	BU-60PR2
10	5/16"	Crimp / Screw	BU-62*	14-20	Nickel	BU-60S
10	5/16"	Threaded	BU-62*	NA	Nickel	BU-60TBO
10	5/16"	Crimp / Solder	BU-62*	14-20	Nickel	BU-60U
10	5/16″	Crimp / Solder / Plug-On	BU-62*	14-20	Stainless Steel	BU-60X
10	5/16″	Pin / Prod Tip	BU-62*	NA	Nickel	BU-61
10	5/16"	Crimp / Solder	BU-72*	16-20	Copper	BU-70C
10	5/16"	Crimp / Screw	BU-72*	16-20	Copper	BU-70CS
10	5/16"	Screw	Insulated	NA	Gold	BU-75K
10	5/16″	Crimp / Screw	BU-87*	14-20	Solid Copper	BU-85C
10	7/16″	Crimp / Screw	BU-49*	14-20	Zinc	BU-55

AMPS	JAW OPENING	WIRE ATTACHMENT	USE WITH INSULATOR	WIRE AWG	PLATING	CLIP NUMBER
10	7/16″	Crimp / Screw	BU-74*	14-20	Zinc	BU-95
10	1/2″	Crimp / Screw	BU-49*	14-20	Zinc	BU-48B
10	1/2″	Crimp	BU-49*	14-20	Zinc	BU-48B2E
10	1/2″	Solder	None	NA	Gold	BU-78K
15	3/4″	Crimp / Solder	Insulated	Up to 12	Nickel	BU-40A-*
20	17/64″	Plug-On	Insulated	NA	Nickel	BU-652-*
20	1/2″	Crimp / Screw	BU-49*	14-20	Solid Copper	BU-48C
20	1/2″	Crimp / Screw	BU-49*	14-18	Solid Copper	BU-50C
20	1/2″	Crimp / Screw	BU-49*	14-18	Solid Copper	BU-51C
20	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Zinc	BU-27
20	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Zinc	JP-5869-B
20	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Zinc	JP-5869-C
20	3/4″	Crimp / Solder	Insulated	Up to 12	Nickel	BU-40C-*
20	1″	Plug-On	Insulated	NA	Nickel	BU-654-*
25	3/4″	Crimp / Screw	BU-26*	Up to 10	Zinc	BU-24APN/APS
30	3/4″	Plug-on	Insulated	NA	Nickel	BU-65-*
30	51/64"	Plug-On	Insulated	NA	Nickel	BU-656-*
40	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Solid Copper	BU-27C
40	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Solid Copper	BU-27CG
40	5/8″	Crimp / Screw	BU-29/90*	Up to 12	Solid Copper	BU-27CGW
40	3/4″	Crimp / Screw	BU-26*	Up to 10	Zinc	BU-25
50	1 1/16"	Crimp / Screw	BU-23*	Up to 8	Zinc	BU-21APN/APS
50	1 1/8″	Crimp / Solder	Insulated	Up to 10	Copper	BU-46A-*
75	3/4″	Crimp / Screw	BU-26*	Up to 10	Solid Copper	BU-25C
75	1 1/8″	Crimp / Solder	Insulated	Up to 10	Solid Copper	BU-46C-*
100	1 1/16″	Lug	BU-23*	Up to 8	Solid Copper	BU-21CPN/CPS
100	1 5/8″	Lug	BU-13*	Up to 3/0	Zinc	BU-11APN/APS
200	1 9/16″	Crimp / Solder	Insulated	Up to 1	Copper	BU-41A-*
200	1 5/8″	Lug	BU-13*	Up to 3/0	Solid Copper	BU-11CPN/CPS
300	1 1/2″	Lug	Insulated	Up to 0	Copper	BU-102B-*
300	1 1/2″	Lug	Insulated	Up to 0	Copper	BU-102BK-*
300	1 13/16"	Lug	BU-35*	Up to 300MCM	Solid Copper	BU-33C
400	1 1/2″	Lug	Insulated	Up to 0	Copper	BU-102W-*
400	1 1/2″	Crimp	Insulated	Up to 1	Copper Jaws	BU-X15400-*
400	1 9/16″	Crimp / Solder	Insulated	Up to 1	Solid Copper	BU-41C-*
LENGTH	TO ORDER PRODUCTS IN VARIOUS LENGTHS & COLORS USE THIS KEY TO PROVIDE THE CORRECT PART NUMBER			000 - *		ey: 2=Red 4=yellow 5=Blue 9=white

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Mueller clips are the industry standard. Our design reflects 100+ years of innovation and improvement. Mueller clips assure teeth that bite, springs that hold, plating that lasts and insulators that protect.

Model # BU-30TBO



(BU-30C) or 304SS (BU-30X) Length: Federal

Rating:

CLIPS

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CID AA59466-001 (BU-30C) Spec:

Material: nickel-plated steel

(BU-30) or solid copper

Miniature Alligator

0.188" (4.8 mm) max

1.1" (27.78mm) 1-3/32" 27.78 mm 5 Amps

7/16" 11.11 mm

3/. 2.38 5/16" | 7.94 mm ⊓

Uses insulator BU-32-*

Model # BU-32-*

Insulator for Miniature Alligator

Model # BU-30/BU-30C/BU-30X

Solder or crimp connection. Jaw opens

Protective flexible vinyl insulator for 30, 30C, 30X Material: PVC

Length: 1.63" (41.28mm) *Std. -0 Black.

Colors: -2 Red. -4 Yellow, -5 Green,

> -6 Blue, -9 White

1/8" I.D. 3.17 mm 19/64" I.D. 7.54 mm 1-7/32" 30.95 mm

Model # BU-31-*

Insulator for Mini Alligator Barrel/Threaded Barrel

Protective for 30BL, 3	flexible vinyl insulato 30TBO	r
Material:	PVC	
Length:	1.63" (41.28mm)	
*Std. Colors:	-0 Black, -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White	1/4" I.D. 6.35 mm 15.24 mm 15.24 mm 15.29 mm 1-5.8" 41.28 mm



Model # BU-30BL

Miniature Alligator with Barrel

Solder or crimp connection Jaw opens 0.188" (4.8 mm) max Material: nickel-plated steel Length: 1.25" (31.75mm) Rating: 5 Amps

Uses insulator BU-31-*





19/64" I.D. 7.54 mm

.16" I.D. 4.06 mm

3/4" 19.05 mm

1-31/32' 50 mm

Model # BU-36-*

Insulator for Micro Alligator

Protective flexible vinyl insulator for 34, 34C, 34X Material: PVC Lenath: 1.22" (30.95mm) *Std. -0 Black, Colors: -2 Red, 1/16" I.D. 1.59 mm -4 Yellow, Ó -5 Green. -6 Blue. 1-7/32" 30.95 mm -9 White

Model # BU-60/BU-60C/BU-60X

Alligator Clip with Barrel

Compatible with all shrouded, unshrouded, or retractable 0.16" (4mm) banana plugs

Solder or crimp connection

Jaw opens 0.31" (7.9 mm) max

Material: nickel-plated steel (BU-60), solid copper (BU-60C), 304 stainless steel (BU-60X)

Length: 1.97" (50mm)

Rating: 10 Amps

Uses insulator BU-62-* or BU-72-*



5/8 15.88

Model # BU-60PR2

Probe Tip Alligator Clip

Accepts standard .080" (2mm)probe tip or test probe tip Jaw opens 0.31" (7.9 mm) max Material: nickel-plated 5/8" 15.88 mm steel 1.97" (50mm) Length:

Rating: 10 Amps

Use insulator BU-62-* or BU-72-*

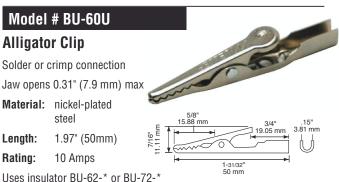
Also available is Model #BU-60PR1 which accepts a .125" (3.1mm) Probe

Model # BU-60TBO Threaded Barrel Alligator Clip 8-32 threaded barrel connection Jaw opens 0.31" (7.9 mm) max Material: nickel-plated steel 15.88 m 11.11 5/32" 3.97 mm Length: 2.13" (53.97mm) Rating: 10 Amps 2-1/8" 53.97 mm Uses insulator BU-62-* or BU-72-*

1-31/32' 50 mm

CLIPS

& INSULATORS





Color Key 0 Black 2 Red 4 Yellow

5	Green	6	Blue	9	White

Model # BU-60HS-*/BU-60CHS-*

Alligator Clip with Acetate Handle and Screw

-	
retractable (with all unshrouded, or D.16" (4mm) banana plugs D.31" (7.9 mm) max
Material:	(BU-60HS-*) nickel-plated steel or (BU-60CHS-*) solid copper clip
Length:	2.34" (59.53mm)
*Std. Colors:	-0 Black, -2 Red, ^{2-11/32"} THREAD 59.53 mm -4 Yellow, -5 Green, -6 Blue, -9 White
Federal Spec:	AA59466-003 (red), (BU-6CHS-2) AA59466-016 (black), (BU-60CHS-0)
Rating:	10 Amps

CLIPS & INSULATORS

Length:

Rating:

Uses insulator BU-62-* or BU-72-*

Model # BU-61



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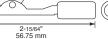
Model # BU-62-* Insulator for Alligator Clips Protective flexible vinyl insulator for 60, 60C, 60CS, 60PR2, 60S, 60TBO, 60U, 60X and 61 13/32" I.D. 10.32 mm Material: PVC 19/32" 15.08 mm 7/32" I.D. 5.55 mm Length: 2.03" (51.59mm) Q *Std. -0 Black. 2-1/32" 51.59 mm Colors: -2 Red. -4 Yellow. -5 Green. -6 Blue, -9 White

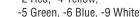
Model # BU-60H-* Alligator Clip with Acetate Handle

Compatible with all unshrouded, or retractable 0.16" (4mm) banana plugs Jaw opens 0.31" (7.9 mm) max Material: nickel-plated steel clip;

Length:	2.23" (56.75mm)
*Std.	-0 Black,
Colors:	-2 Red, -4 Yellow,
	-5 Green, -6 Blue, -9
Rating:	10 Amps







Rating:



Probe Tip Alligator Clip with Acetate Handle

Accepts sta	andard probe tip or test	probe tip
Material:	nickel-plated steel clip	
Length:	2.23" (56.75mm)	lass
*Std. Colors:	-0 Black, -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White	
Rating:	10 Amps	

Model # BU-63-*/BU-63C-*

Insulated Alligator Clip

BU-63-* same as BU-60S and includes a skin-tight, two-piece, flexible insulator BU-63C-* same as BU-60CS and includes a skin-tight, two piece, flexible insulator

Compatible with all shrouded, unshrouded, or retractable 0.16" (4mm) banana plugs

10 Amps

Material: nickel-plated steel (BU-63-*) or solid copper (BU-63C-*) Length: 2.25" (57.15mm) *Std. -0 Black, -2 Red, -4 Yellow,-5 Green, **Colors:** 57.15 mm -6 Blue, -9 White 13/64 " O.D.

5 16 mm

3/8" I.D. 4.52 mm

3/16" I.D. 4.76 mm



Rating:

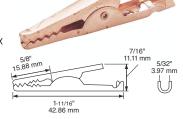


Model # BU-70/BU-70C

Alligator Clip

Solder or crimp connection Jaw opens 0.313" (7.9 mm) max

Material: nickel-plated steel (BU-70) or (BU-70C) solid copper

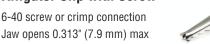


Length: 1.69" (42.86mm)

Rating: 5 Amps (BU-70) or 10 Amps (BU-70C) Uses insulator BU-72-*

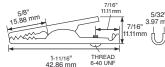
Model # BU-70S/BU-70CS

Alligator Clip with Screw



Material: (BU-70S) nickel-plated steel or (BU-70CS) solid copper

Length: 1.69" (42.86mm) Federal AA59466-0017



Spec: (BU-70CS) 5 Amps (BU-70S) or 10 Amps (BU-70CS) Rating:

Uses insulator BU-72-*



Model # BU-85/BU-85C

Crocodile Clip

Crimp or screw connection

Jaw opens 0.313" (7.9 mm) max Nesting teeth provide solid contact along entire length of jaw

Material: (BU-85) zinc-plated steel or (BU-85C) solid copper

Length: 2.125" (53.97mm)

Federal Spec: AA59466-005 (BU-85C)

5 Amps (BU-85) or 10 Amps (BU-85C) Rating: Uses insulator BU-87-*

Model # BU-87-* Insulator for Crocodile Clip Protective flexible vinyl insulator for 85, 85C Material: PVC 29/64" I.D. 11.51 mm 5/32" I.D. 3.97 mm Length: 1.7" (43.26mm) *Std. -0 Black. 6 -2 Red, -4 Yellow, **Colors:** -5 Green, -6 Blue, 1-45/64" 43.26 mm -9 White

CLIPS

& INSULATORS

THREAD 6-40 UNF

2-1/8" 53.97 mm

Model # BU-651-*

Small Safety Alligator Clip

Compatible with all unshrouded, or retractable 0.16" (4mm) banana plugs Jaw opens 0.27" (7 mm) max

- Material: nickel-plated steel
- clip, glass-filled nylon housing
- Length: 2.24" (57mm)
- *Std. -0 Black, -2 Red

Colors:

Rating: 300 V Category II or 150 Category III 10 Amps, IEC 1010 Compliant

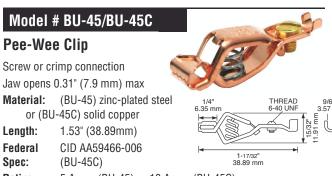


300 V Category II. or 150 V Category III.

20 Amps, IEC 1010 Compliant

Color Key

0	Black	2	Red	4	Yellow	
5	Green	6	Blue	9	White	



Rating: 5 Amps (BU-45) or 10 Amps (BU-45C)

Uses insulator BU-47-*

Model # BU-65-*

Large Safety Alligator Clip

3.24" (82mm)

Compatible with all shrouded, unshrouded, or retractable 0.16" (4mm) banana plugs Jaw opens 0.75" (19 mm) max Material: nickel-plated steel clip, glass-filled nylon housing

3.23" (82.04mm) Length: *Std. -0 Black, Colors: -2 Red, -4 Yellow, -5 Green, -6 Blue Rating: 1000 V, 30 Amps, IEC 1010 Compliant UL Listed

Model # BU-47-*

Insulator for Pee-Wee Clip

Protective flexible vinyl insulator for 45, 45C

Material:	PVC	
Length:	2.02" (51.2 mm)	
*Std.	-0 Black,	1
Colors:	-2 Red,	27/64" I.D.
	-4 Yellow,	10.72 mm
	-5 Green,	
	-6 Blue,	
	-9 White	P ≪ 2-1/64" 51.2 mm

Model # BU-110-*

Fully Insulated Mini Clip

Compatible with all shrouded, unshrouded, or retractable .016" (4mm) banana plugs. Jaw opens 0.31" (7.9mm) Material: Nickel plated steel & nylon Length: 1.65" (42mm) *Std. Colors: -0 Black, -2 Red Rating: 300V, 6 Amps



Model # BU-55

Economy Clip

Screw or crimp connection Jaw opens 0.44" (11.1 mm) max zinc-plated steel Material: Length: 2" (50.8mm) Rating: 10 Amps Uses insulator BU-49-*



5/32" I.D. 3.97 mm

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CLIPS & INSULATORS Model # BU-652-* **Small Safety Alligator Clip with Extended Banana Jack** Compatible with all shrouded, unshrouded, or retractable 0.16" (4mm) banana plugs Jaw opens 0.27" (7 mm) max Material: nickel-plated steel clip, glass-filled nylon housing Lenath: *Std. Colors -0 Black. -2 Red

Rating:

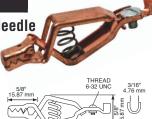


Model # BU-50C

Meter Testing Clip with Needle

Has a solid beryllium copper piercing needle in the top jaw. Jaw opens .5" (12.5mm) Excellent for quick connection to insulated wire.

Material: Solid Copper Length: 2.28" (57.12mm) 20 Amps Rating: Uses insulator BU-49-*

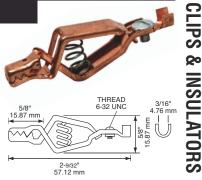


2-9/32" 57.12 mm

Model # BU-51C

Meter Testing Clip

Same as BU-50C except without insulation piercing needle Jaw opens 0.5" (12.7 mm) max Material: Solid copper Length: 2.28" (57.12mm) 20 Amps Rating: Uses insulator BU-49-*



Model # BU-48B/BU-48C

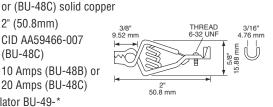
Automotive Analyzer Clip

Screw or crimp connection Jaw opens 0.5" (12.7 mm) max Teeth mesh on three sides of the jaw Material: (BU-48B) zinc-plated steel

	(/ /
Length:	2" (50.8mm)
Federal	CID AA59466-007
Spec:	(BU-48C)
Rating:	10 Amps (BU-48B) or
	20 Amps (BU-48C)

Uses insulator BU-49-*



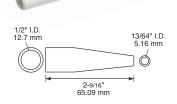


Model # BU-49-*

Insulator for Automotive Analyzer Clip

Protective flexible vinyl insulator for 48B, 48B2E, 48C, 50C, 51C, 55, 95 Material: PVC

Length:	2.56" (65.09mm)
*Std.	-0 Black,
Colors:	-2 Red,
	-4 Yellow,
	-5 Green,
	-6 Blue,
	-9 White



Model # BU-48B2E

Automotive Analyzer Clip

Double crimp connection Jaw opens 0.5" (12.7 mm) max zinc-plated steel Material: Length: 2" (50.8mm) Rating: 10 Amps Uses insulator BU-49-*





Uses insulator BU-29-* or BU-90-*



CLIPS & INSULATORS

Model # BU-27CG/BU-27CGW Geophone Clip

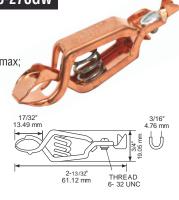
Crimp or screw connection; Jaw opens 0.625" (16 mm) max;

Curved jaws clip on to seismograph rings **Material:** solid copper;

Spring: steel

Length: 2.4" (61.1mm) Rating: 40 Amps

Uses insulator BU-29-* or BU-90-*



Color Key

0	Black	2	Red	2	4	Yellow	
5	Green	6	Blue	ę	9	White	

Model # BU-24APN/BU-24APS

Heavy Duty Clip

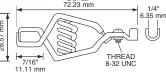
Crimp or screw connection; Jaw opens 0.75" (19 mm) max; clip unmarked (BU-24APN) and marked positive (BU-24APS)

Material: zinc-plated steel; Spring: steel

Length: 2.84" (72.23mm) Rating: 25 Amps

Uses insulator BU-26-*





Model # BU-29-*

Insulator for General Purpose/Geophone Clips

Protective flexible vinyl insulator for

27, 27C, 27CG, 27CGW

Material: PVC Length: 3.5" (88.9mm) *Std. -0 Black, Colors: -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White

Model # BU-25/BU-25C

Automotive Clip

Crimp or screw connection; Jaw opens 0.75" (19 mm) max; teeth mesh on three sides of the jaw zinc-plated steel (BU-25) Material: or solid copper (BU-25C); 21/32" 16.67 mm 9/32 7 15 mm Spring: steel Length: 3" (72.6mm) Federal Spec: CID AA59466-009 76.2 mm (BU-25C) THREAD 8-32 UNC Rating: 40 Amps (BU-25) or 75 Amps (BU-25C)

Uses insulator BU-26-*

Model # BU-90-*

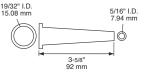
Insulator for General Purpose/Geophone Clips

Protective flexible vinyl insulator for 27, 27C, 27CG and 27CGW Accepts larger wires or cables than BU-29-*

Material:	PVC
Length:	3.375" (92mm)
*Std.	-0 Black,
Colors:	-2 Red,

-4 Yellow, -5 Green, -6 Blue, -9 White





Model # BU-26-*

Insulator for Automotive Clip

Protective flexible vinyl insulator for 24A, 25, 25C Material: PVC Length: 3.88" (98.4 mm) *Std. -0 Black, Colors: -2 Red, -4 Yellow, -5 Green,





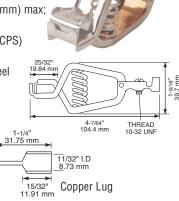
Model # BU-21APN/BU-21APS/BU-21CPN/BU-21CPS

Heavy Duty Clip for Battery and Test Work

Crimp or screw connection; copper version (21C) equipped with removable copper lug; Jaw opens 1.06" (27 mm) max; clip unmarked (BU-21APN/CPN) and marked positive (BU-21APS/CPS)

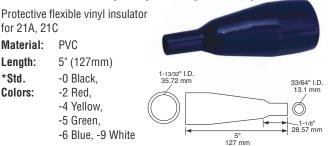
Material: zinc-plated steel (21A) or solid copper (21C); Spring: steel Length: 4.11" (104.4mm) Federal Spec: CID AA59466-010 (BU-21CPN)

Rating: 50 Amps (21A) or 100 Amps (21C) Uses insulator BU-23-*



Model # BU-23-*

Insulator for Heavy Duty Battery Test Clip



Model # BU-11APN/BU-11APS/BU-11CPN/BU-11CPS

Heavy Duty Clip for Grounding Applications

BU-11 series clips have a lug connection Jaw opens 1.625" (41.3 mm) max Clip unmarked (BU-11APN/CPN) and marked positive (BU-11APS/CPS) Material: zinc-plated steel (11A) or solid copper (11C); Spring: steel Length: 6" (152.4 mm) Federal CID AA59466-011 Spec: (BU-11CPN) Rating: 100 Amps (11A)

or 200 Amps (11C)

Uses insulator BU-13-*

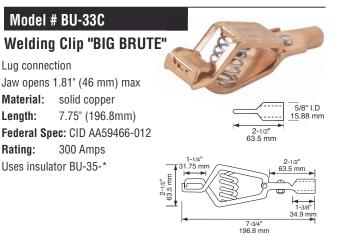
Ψ. 3/4" 19.05 mm 152.4 mm 1-7/8 47.6 mm 1/2" I.D 12.7 mm

Model # BU-13-*

Insulator for Heavy Duty Clip

Protective flexible vinyl insulator for 11A, 11C Material: PVC Lenath: 6.8" (173mm) *Std

*Std.	-0 Black, -2 Red,
Colors:	-4 Yellow, -5 Green,
	-6 Blue, -9 White



Model # BU-35-*

Insulator for Welding Clip

Protective flexible vinyl insulator for 33C Material: PVC

material.	1 00
Length:	8.75" (222mm)
*Std.	-0 Black,
Colors:	-2 Red.

2-1/4" I.D 57.2 mm 53/64" I.D. 21 mm Q 8-3/4" 222 mm



Model # BU-58

CLIPS

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Grounding Clamp

Attaches to pipe up to 1 3/8" outer diameter Material: zinc-plated steel Length: 2.31" (58.75mm) Rating: 50 Amps

Micro Plier-Type Clip

Solder or crimp connection

Material:

Length:

Colors:

Rating:

*Std.

Jaw opens 0.75" (19 mm) max

2.3" (58mm)

15 Amps (BU-40A),

20 Amps (BU-40C)

-0 Black,

-2 Red,



Color Key

l	0	Black	2	Red	2	ŀΥ	′ellow	
Į	5	Green	6	Blue	ę	V	Vhite	

Model # BU-46PR-*

Insulator for Miniature Plier-Type Clip

Protective flexible vinyl insulato for BU-46			
Material:	PVC		
Length:	1.7" (43.18mm)		
*Std.	-0 Black,		
Colors:	-2 Red.		

Model # BU-41A-*/BU-41APN/BU-41C-*/BU-41CPN

Plier-Type Clip

*Std.

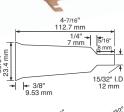
Colors:

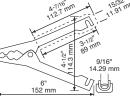
Federal Spec:

Jaw opens 1.625" (41.3 mm) max Locks on to both side and top mounted battery terminals Material: copper-plated steel (BU-41A) or solid copper (BU-41C), PVC insulator (BU-43PR-*) Lenath:

6" (152mm)	
Insulator (BU-43PR-*)	"#
in -0 Black, -2 Red,	59/6 ² 23.4 n
-4 Yellow, -5 Green,	1) A
-6 Blue, -9 White	-
CID AA59466-014	
BU-41-CPS-VZZZ-2 (red) ar	nd

CID AA59466-015. BU-41CPN-VZZZ-0 (black) Rating: 200 Amps (41A) or 400 Amps (41C)





Model # BU-46A-*/BU-46C-*/BU-46X Miniature Plier-Type Clip Solder or crimp connection Jaw opens 1.125" (28.6 mm) max

Material: copper-plated steel (BU-46A) or solid copper (BU-46C), 304SS (BU-46X) PVC insulator (BU-46PR-*)

Length: 2.88" (98.42mm) *Std. Insulator (BU-46PR-*) **Colors**: in -0 Black, -2 Red

Rating: 50 Amps (46A) or

75 Amps (46C)





Model # BU-43PR-*

Insulator Pair for Plier-Type Clip

Protective flexible vinvl insulator

for BU-41

*Std.

Material: PVC Length: 4.4" (112.73mm)

-0 Black,

Colors: -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White

Model # BU-40A-*/BU-40C-* (BU-40A) nickel-plated steel or (BU-40C) solid copper



Model # BU-102B-*/BU-102BK-*

Insulated Battery Clip

Solder lug connection. Fully insulated clip with serrated jaws; BU-102BK-* has Kelvinized isolated jaws and no copper shunt

Material: Housing: glass filled nylon; Jaw: copper; Spring: music wire, zinc plated

Length:	6.5" (165mm)
*Std.	-0 Black,
Colors:	-2 Red
Rating:	300 Amps



Model # BU-75K

Kelvin Clip

Screw connection. Jaw opens 0.313" (7.9 mm) max. Isolated jaws Material: Silver/Gold tip contacts, nylon housing Length: 1.625" (41.28mm) Rating: 10 Amps

1/8" 1/8" 1/8" 1/5/8" 1/28 mm **CLIPS & INSULATORS**

Model # BU-102W-*

Insulated Welding Clip

Solder lug connection. Fully insulated clip with serrated contact pad and braided copper shunt

Material: Housing: glass filled nylon; Jaw: copper;

Spring: music wire, zinc plated

Length: 6.5" (165mm) *Std. -0 Black, Colors: -2 Red Rating: 400 Amps



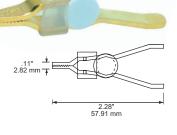
Model # BU-78K

Kelvin Clip

Solder connection. Jaw opens 0.5" (12 mm) max Isolated jaws

- Material: Gold contacts
- Length: 2.28" (57.91mm)
- Rating: 10 Amps

Wires run through channel in thimbal and solder into holes under the silicone spring.



Model # BU-X15400-*

Epoxy Coated Battery Clip

Solder/crimp connection. Jaw opens 1.50" (38.1 mm) max. Locks on to both side and top mounted battery terminals

Material: steel, epoxy coated clips with copper plated jaws

Length: 6.75" (171.45mm) *Std. Colors: -0 Black, -2 Red Rating: 200 Amps



Model # BU-P2240-*

Alligator Clip & Insulator, (10 Pack)

Ten Each of BU-60 Alligator Clips and BU-62-* Insulators in a convenient bag ***Std. Colors:** -0 Black, -2 Red,





Model # JP-25182-***

Small Angled Nose Telecom Clip with Bed of Nails



Mueller – J.S. Popper brand. Jaw opens 1.0" (25.4mm). Uses bed of nails to pierce insulation

Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.34" (59.4mm)

Connection -N Without Hardware, -L With Loose Hardware,

Options: -J Banana Jack, -TJ Threaded Banana Jack -S Nickel plated steel version of clip

Model # JP-8099-***

Large Angled Nose Telecom Clip with Single Spike

Mueller – J.S. Popper brand

Jaw opens 1.0" (25.4mm) Uses single spike to pierce insulation

Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.34" (59.4mm)

Connection -N Without Hardware, -L With Loose Hardware, **Options:** -J Banana Jack, -TJ Threaded Banana Jack

Model # JP-8078-***

Large Angled Nose Telecom Clip with Hex Screw Attached Single Spike

Mueller – J.S. Popper brand Jaw opens 1.0" (25.4mm) Uses single spike to pierce insulation



Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.34" (59.4mm)

Connection -N Without Hardware, -L With Loose Hardware, **Options:** -J Banana Jack, -TJ Threaded Banana Jack



Model # JP-8783-***

Large Angled Nose Telecom Clip with Bed of Nails and Single Spike

Mueller – J.S. Popper brand. Jaw opens 1.0" (25.4mm). Uses single spike and bed of nails to pierce insulation

Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.61" (66.4mm)

- Connection -N Without Hardware, -L With Loose Hardware,
- **Options:** -J Banana Jack, -TJ Threaded Banana Jack
 - -S Nickel plated steel version of clip

Model # JP-33699-***

Large Straight Nose Telecom Clip with Single Spike

Mueller - J.S. Popper brand. Jaw opens 1.0" (25.4mm)

Uses single spike to pierce insulation

Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.61" (66.4mm)

Connection-N Without Hardware, -L With Loose Hardware,Options:-J Banana Jack, -TJ Threaded Banana Jack

Model # JP-33674-***

Large Straight Nose Telecom Clip with Bed of Nails and Single Spike

Mueller – J.S. Popper brand. Jaw opens 1.0" (25.4mm) Uses single spike and bed of nails to pierce insulation

Material: nickel-silver jaws; includes brass screw, brass nut, brass washer, and bronze star washer

Length: 2.61" (66.4mm)

Connection-N Without Hardware, -L With Loose Hardware,Options:-J Banana Jack, -TJ Threaded Banana Jack

Model #JP-5869-B

Contact Clip with Bed of Nails

Mueller – J.S. Popper brand Jaw opens 0.52" (13.2mm) Uses bed of nails to pierce insulation **Material:** Steel **Length:** 2.4" (61.0mm)





Model # JP-8681-*

Insulator for Telecom Clips

Mueller – J.S. Popper brand Protective flexible vinyl insulator for 25182, 8099, 8078, 8783, 33699, 33674

Material: PVC Length: 2.4" (61.0mm) *Std. -0 Black, Colors: -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White



Model # JP-8681-C*

Cut Insulator for Telecom Clips

Mueller – J.S. Popper brand Protective flexible vinyl insulator for telecom clips with banana jack or threaded banana jack connections Material: PVC Length: 1.8" (45.7mm) *Std. -0 Black, **Colors**: -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White

CLIPS & INSULATORS