

USB 3.2 GEN 1 Type A Standard / Reverse Receptacle – GSB3111, GSB311A, GSB3112, GSB3115, GSB3114, GSB3116, GSB31D1, GSB3121, GSB311J, GSB3164 Product Series

As SuperSpeed USB, this upgraded interface offers a number of enhanced features. USB3.2 GEN 1 now operates with full-duplex signaling over two differential pairs, improving host-directed simultaneous-by-directional communication.

- Over 10X performance increase over USB 2.0
- Backward compatible with USB 2.0
- High-speed 5Gb/s transmission
- Optimized Power Efficiency
- Fast Sync-N-Go



TARGET MARKETS



FEATURES

- Height optional
- Optional terminal Dip length
- Terminal design high reliable contact force
- Super speed up to 5 Gb/s transmission
- Optimized design on shell structure
- Rugged gold-plated leaf contact for reliability needs
- 7 metal friction lock grounding fingers and polarization plastic
- Halogen-free material

BENEFITS

- Customer design flexibility
- Suitable for different PC Board thickness
- Superior electrical performance for low contact resistance
- High performance in signal integrity
- Full metal shielding for EMI / RFI / ESD protection
- High gold plating improves contact resistance & prevents corrosion
- Superior in tactile on plug operation with feeling like snap-in and catch
- Meets environmental, health and safety requirements

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TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic, complies with UL 94V-0, optional colour
- Shell: Stainless steel, nickel plating overall
- Contact: Copper alloy, selective gold plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under-plated overall

MECHANICAL PERFORMANCE

- Insertion Force: 35N (3.57 Kgf) max.
- Withdrawal Force: 10N (1.02 Kgf) min., after test, 8N (0.81Kgf)
- Durability: 5000 cycle unplug/ plug
- Vibration: No disturbance greater than 1µs
- Mechanical Shock: No disturbance greater than 1µs

ELECTRICAL PERFORMANCE

- Low Level Contact: Initial 30mΩ max. for VBUS and GND contacts, 50mΩ max. for all other contacts, ΔR:10mΩ max.
- Insulation:100MΩ min.
- Voltage: 30VDC
- Current: 1.8A max.
- Mated Connection Impedance: 90Ω±15Ω (85Ω ~ 105Ω)

ENVIRONMENTAL

- Operating Temperature Range: -40°C~ 85°C
- Shipping and Storage Temperature: -40°C~ 85°C
- Thermal Shock: No physical damage
- Cyclic Temperature and Humidity: No physical damage
- Thermal shock: No evidence of physical damage
- Temperature Life: No physical damage
- Solderability: 95% of immersed area, No voids and pin holes
- Mixed Flowing Gas: No physical damage
- Soldering Heat: No physical damage

SPECIFICATIONS

- Amphenol Specification: PS-7440/PS-7411/PS-7425

PACKAGING

- Tape & Reel
- Tray

TARGET MARKETS/APPLICATIONS



Telecom/Datacom Equipment
Test Card and Card Extenders
High End Computers
Test and Measurement Equipment
IP Phone
Routers
Servers
Set Top Box
Gaming

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PART NUMBERS

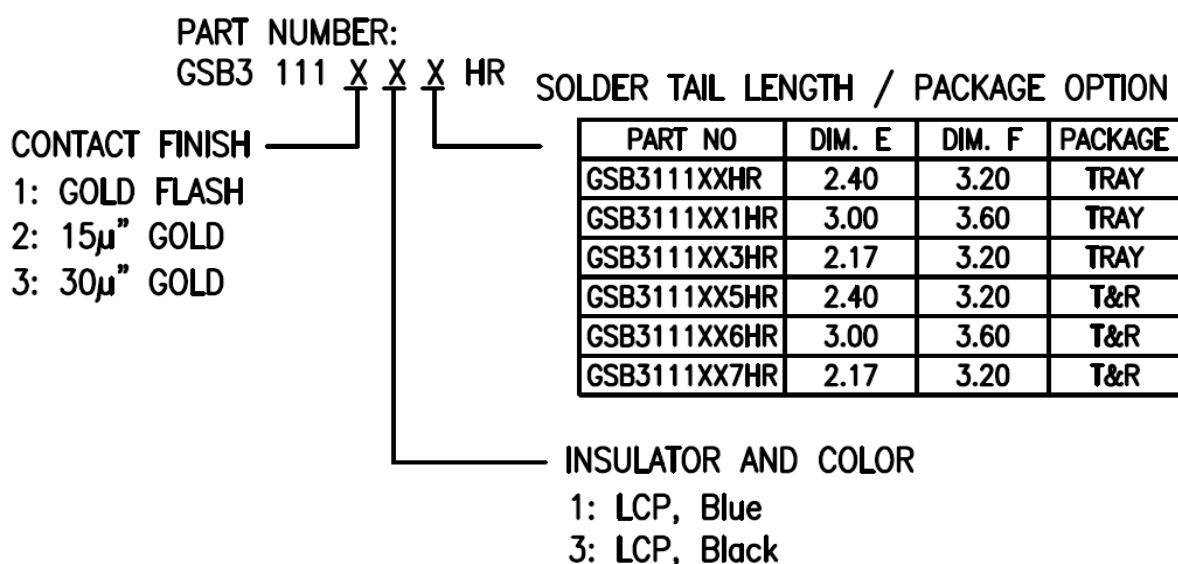
Description	Part Numbers
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, 9 Pins, Shell with Nickel Plating, Selective Gold Plating on Contact Area	GSB3111XXXHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, 9 Pins, Shell Dip with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 2.1mm	GSB3111XXX5H4HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Reverse, 9 Pins, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 2mm	GSB311AX1EU
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked, 18 Positions, Shell Dip with Nickel Plating, Gold Flash, Dip 2.4mm, Blue High Temperature Housing, Tray Packing	GSB31121XHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Short Body, 18 Positions, Shell Kink with Nickel Plating, Selective Gold Plating on Contact Area	GSB3112XXXF1HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked, 18 Positions, Shell Kink with Nickel Plating, Selective Gold Plating on Contact Area	GSB3112XXXHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked, 18 Positions, Shell Kink with Nickel Plating, Selective Gold Plating on Contact Area	GSB3112XXX2H5HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked, 18 Positions, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 3.5mm	GSB3112XXX1H3EU
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.91mm Height, 18 Positions, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area, Terminal Tail Length 2.4mm	GSB3115XXFXHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.91mm Height, 18 Positions, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXXFHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 11.42mm Height, 18 Positions, Shell Without Flange on Top and Bottom, Shell Front Dip 3.2mm, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXX1F3HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 11.42mm Height, 18 Positions, Shell Without Flange on Top and Bottom, Shell Front Dip 1.4mm, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXXTF3HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.91mm Height, 18 Positions, Shell Without Flange on Top and Bottom, Shell Front Dip 1.4mm, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXXXF1HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.37mm Height, 18 Positions, Shell Without Flange on Top and Bottom, Shell Front Dip 1.4mm, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXXXF5HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.91mm Height, 18 Positions, Shell Without Flange on Top and Bottom, Shell Front Dip 1.4mm, Shell with Nickel Plating, Shell Dip Pitch 17.42mm, Selective Gold Plating on Contact Area	GSB3115XXXXF6HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Stacked Sink, 9.91mm Height, 18 Positions, Shell Front Dip 2.1mm, Shell with Nickel Plating, Shell Dip Pitch 15.6mm, Selective Gold Plating on Contact Area	GSB3115XXXXF9HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle Sink, 2.36mm Height, 9 Pins, Without Flange, Shell Dip with Nickel Plating, Selective Gold Plating on Contact Area	GSB3114XXFHR
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Dip with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 1.9mm	GSB3116X75KAHR
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Dip with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 1.9mm	GSB3116X75KHR
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Kink with Nickel Plating, 30µ" Gold	GSB31163XXHR

► **USB 3.2 GEN 1 Type A Standard / Reverse Receptacle – GSB3111, GSB311A, GSB3112, GSB3115, GSB3114, GSB3116, GSB31D1, GSB3121, GSB311J, GSB3164 Product Series**

PART NUMBERS

Description	Part Numbers
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Kink with Nickel Plating, 30µ" Gold, Terminal Tail Length 4.4mm	GSB3116346FHR
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area	GSB31D1XXX1HHR
USB 3.2, GEN 1 Type A, Receptacle, Upright Reverse, 9 Positions, Shell Forklock and Terminal Tail Length 3.8mm, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area	GSB31D1XXX1H2HR
USB 3.2, GEN 1 Type A, Receptacle, Vertical, 9 Positions, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area	GSB3121XXXCHR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, High Rise, 12mm Height, 9 Pins, Shell Kink with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 2.4mm	GSB311JXXXC2EU
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, High Rise, 12mm Height, 9 Pins, Shell Forklock with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 2.4mm	GSB311J310H1HR
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, High Rise, 6.96mm Height, 9 Positions, Shell 4 Touch Fingers with Nickel Plating, Selective Gold Plating on Contact Area, Center Height 4.1mm, Terminal Tail Length 4.2mm	GSB311JXX2H4EU
USB 3.2, GEN 1 Type A, Receptacle, Right Angle, High Rise, 9.73mm Height, 9 Positions, Shell Dip with Nickel Plating, Selective Gold Plating on Contact Area, Terminal Tail Length 2.5mm	GSB311JXX0H3HR
USB 3.2, GEN 1 Type B, Receptacle, Standard, 9 Positions, Shell Kink with Nickel Plating, 30µ" Gold, Terminal Tail Length 2.8mm	GSB3211XXXWEU
USB 3.2, GEN 1 Type A, Plug, Right Angle SMT, 9 Positions, Offset 0.95mm, 3.2mm Height, Shell Dip with Nickel Plating, 30µ" Gold	GSB3164X1CEU
USB 3.2, GEN 1 Type A, Plug, Right Angle SMT, 9 Positions, Offset 0.3mm, 1.9mm Height, Shell Dip with Nickel Plating, 30µ" Gold	GSB3164X5XHR

PART NUMBER SELECTORS



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PART NO. GSB311AX1EU

PLATING OF
SOLDERING AREA
4: 100u” MATTE TIN

PART NUMBER:
GSB3 112 1 X HR

CONTACT FINISH ——— | ——— INSULATOR AND COLOR
1: GOLD FLASH | 1: LCP, Blue
4: Nylon 9T, Blue

P/N: GSB3112 X X X F1HR

CONTACT FINISH | | | HALOGEN FREE
1: FLASH GOLD | | |
2: 15u” GOLD | | | TAIL LENGTH (DIM A)
3: 30u” GOLD | | | 0: 2.17
1: 2.67

INSULATOR
7: PA4T; BLUE (300C).
8: PA4T; BLACK

PART NUMBER:
GSB3 112 X X X HR

CONTACT FINISH ——— | ——— SOLDER TAIL LENGTH
3: 30μ” GOLD | | BLANK: Standard (2.4mm)
4: 2μ” GOLD+ | | 1: 3.00mm
30μ” Ni-Pd | |

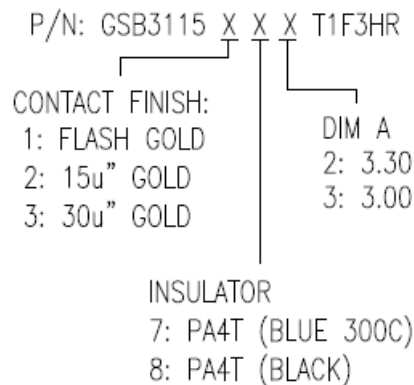
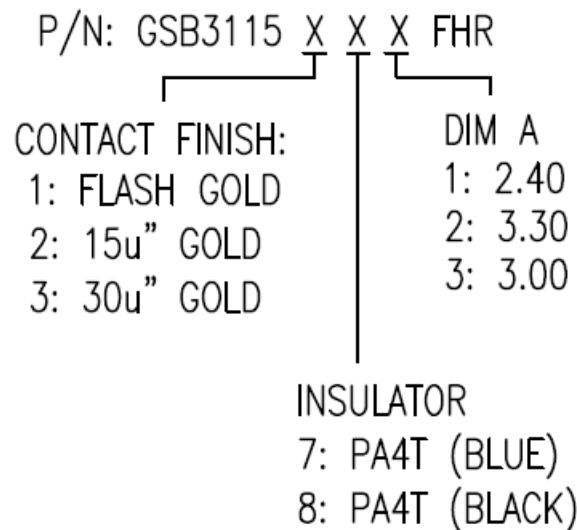
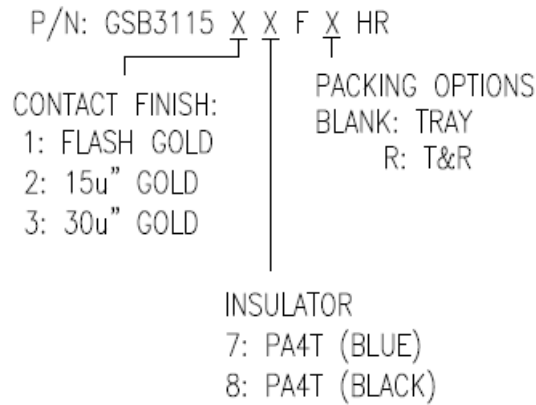
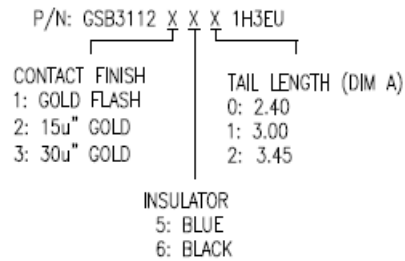
INSULATOR AND COLOR
1: LCP, Blue
3: LCP, Black
4: Nylon, Blue
6: Nylon, Black

P/N: GSB3112 X X X 2H5HR

CONTACT FINISH | | | TAIL LENGTH (DIM A)
1: GOLD FLASH | | | 0: 2.40
2: 15u” GOLD | | | 1: 3.00
3: 30u” GOLD | | | 2: 3.45

INSULATOR
5: BLUE
6: BLACK

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P/N: GSB3115 X X X TF3HR

CONTACT FINISH:
 1: FLASH GOLD
 2: 15u" GOLD
 3: 30u" GOLD

DIM A
 1: 2.40
 2: 3.30
 3: 3.00

INSULATOR
 7: PA4T (BLUE 300C)
 8: PA4T (BLACK)

P/N: GSB3115 X X X X F1HR

CONTACT FINISH:
 1: FLASH GOLD
 2: 15u" GOLD
 3: 30u" GOLD

DIM A
 1: 2.40
 2: 3.30
 3: 3.00

INSULATOR
 7: PA4T (BLUE)
 8: PA4T (BLACK)

PACKING
 BLANK: TRAY
 R: T&R

P/N: GSB3115 X X X X F5HR

CONTACT FINISH:
 1: FLASH GOLD
 2: 15u" GOLD
 3: 30u" GOLD

DIM A
 1: 1.80
 2: 2.10
 3: 2.80
 4: 2.40

INSULATOR
 7: PA4T (BLUE 300C)
 8: PA4T (BLACK)

PACKING
 T: TRAY
 R: TAPE & REEL

P/N: GSB3115 X X X X F6HR

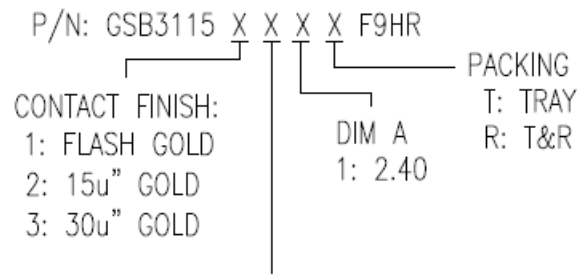
CONTACT FINISH:
 1: FLASH GOLD
 2: 15u" GOLD
 3: 30u" GOLD

DIM L
 1: 2.40
 2: 3.30
 3: 3.00

INSULATOR
 7: PA4T (BLUE)
 8: PA4T (BLACK)

PACKING
 T: TRAY
 R: T&R

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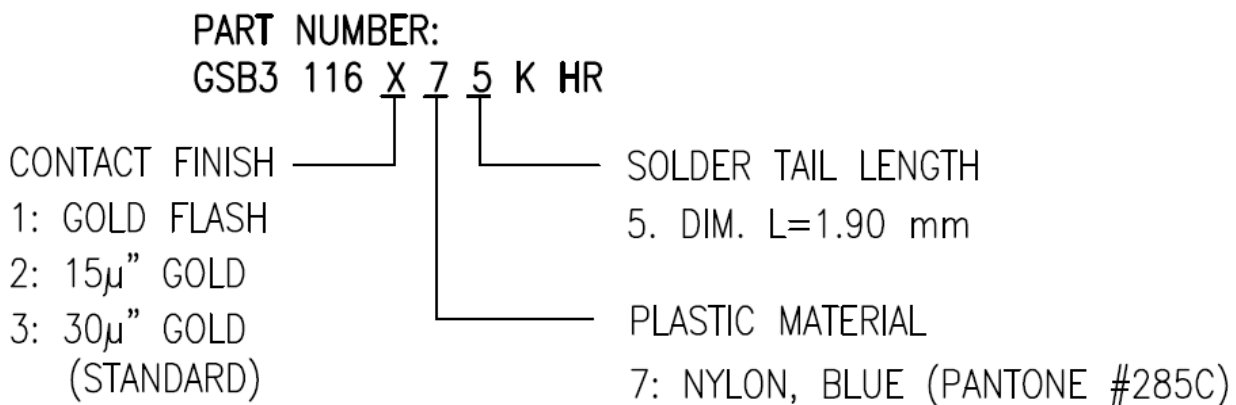
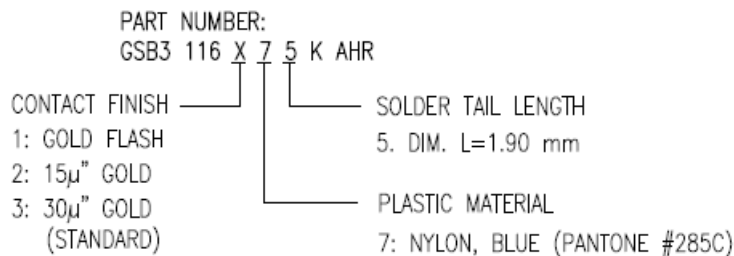


INSULATOR
 7: PA4T (BLUE)
 8: PA4T (BLACK)

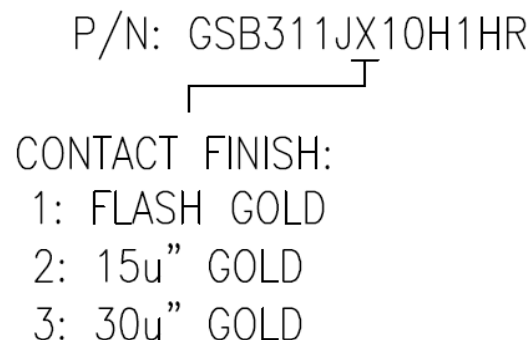
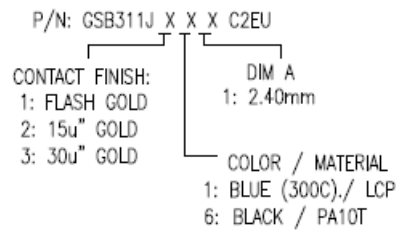
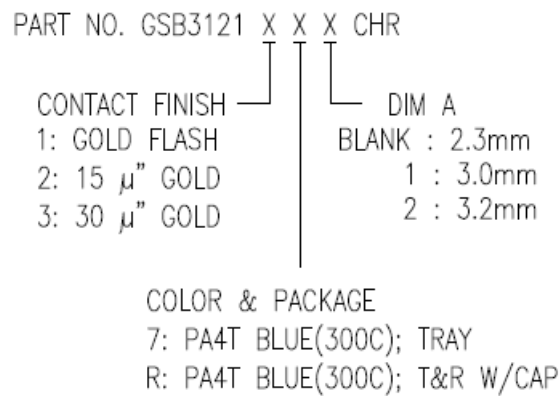
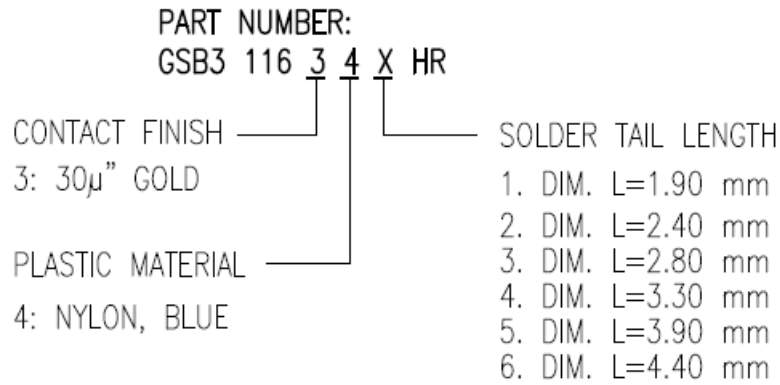


DIM L / COLOR / T&R

5: 1.70mm/BLUE 7: 1.70mm/BLACK 8: 3.00mm/BLACK 9: 3.00mm/BLUE	TYPE I
A: 1.70mm/BLUE B: 1.70mm/BLACK C: 3.00mm/BLACK D: 3.00mm/BLUE	TYPE II



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