



**USB**  
COMPATIBLE



## SUPER ITS - USB SUPERSEAL

# Ruggedized USB Type A MIL-DTL-5015 reverse-bayonet field connectors for harsh- environment applications

IP67 open-face rated connectors for wire and printed circuit board terminations plus pigtail cable assemblies.



### Features:

- Superior sealing—IP68 mated, IP67 unmated—for complete protection against water, sand and dust
- Highly durable USB 2.0 Type A-equipped designs, with enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, USB jack, and PC tail termination options



Rugged reverse-bayonet connector with USB Type A commercial connector interface



Complete range of connector configurations including bulkhead feedthrus



Wide range of wire termination options (crimp contact version shown)

SUPER ITS: RUGGEDIZED RJ45 ETHERNET





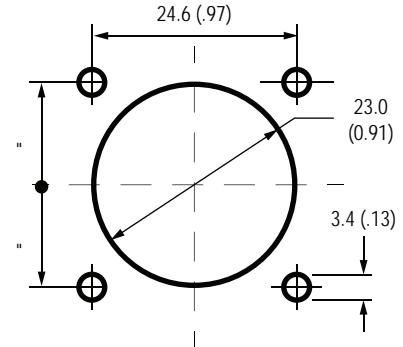
# COMPATIBLE WITH USB 2.0 AND 1.1 Super ITS - USB Type A SuperSeal™ Rugged Field Connectors



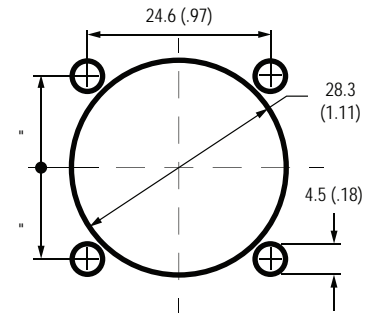
Environmental, shielded, reverse-bayonet connectors

SUPER ITS: RUGGEDIZED RJ45 ETHERNET AND USB

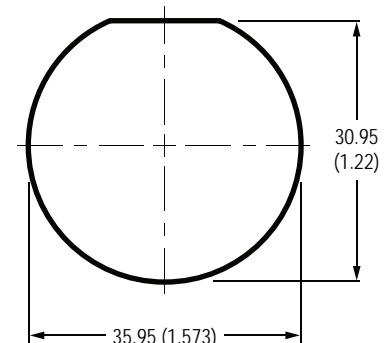
## GLENAIR SUPER ITS RJ45 PANEL CUTOUTS FOR SHELL SIZE 18



SQUARE FLANGE  
FRONT PANEL MOUNT



SQUARE FLANGE  
REAR PANEL MOUNT



JAM NUT MOUNT

### Super ITS - USB 2.0 Type A Specifications

Material and Finish	
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated
USB Coupler Housing	UL94V-0 Compliant ABS or PPS
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Size	16
Electrical Specifications	
Data Rate	480 MBps
Power Usage	500 milliamps (mA)
Current Rating	1.5 Amps,
D.W.V.	500 Vac
I.R.	1000 Mega ohms
Cabling Length	5.0 Meters Max
Shield Continuity	Continuous through coupler or continuous coupler to shell
Environmental/Mechanical Performance	
Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	<b>Mod Code 1865</b> meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability <b>Mod Code 928</b> meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Backshell Interface	Consult Factory
Mating System	Reverse Bayonet
Mating Cycles	500
Vibration	10G sine 10Hz - 2000Hz
Shock	50G - 11ms

### Glenair Super ITS Material and Finish Codes

Code	Material	Finish	Salt Spray	Electrical Conductivity	Operating Temperature	RoHS
F6	Aluminum	Black Epoxy Paint	500 hrs	No	-55° to +125°C	☑
F7	Aluminum	Black Zinc Nickel	500 hrs	Yes	-55° to +125°C	☑
F11	Aluminum	Electroless Nickel	48 hrs	Yes	-55° to +125°C	☑
G3	Aluminum	Cadmium, Olive Drab	500 hrs	Yes	-55° to +125°C	☒



# COMPATIBLE WITH USB 2.0 AND 1.1 Super ITS - USB Type A SuperSeal™ Rugged Field Connectors



## Environmental, shielded, reverse-bayonet connectors

### ASTM E595 Outgassing

#### MOD CODE 186S

- SuperSeal® connectors specially processed to meet ASTM E595 outgassing requirements.
- Modification code specifies special outgassing bakeout processing.
- Meets NASA Screening Level 1 requirements

Space flight equipment requires low-outgassing components in order to prevent degradation to optics and other sensitive instruments. The space industry has adopted a standardized test procedure, ASTM E595, to evaluate outgassing properties. In the ASTM test, material samples are heated to 125° C at a vacuum of  $5 \times 10^{-5}$  torr for 24 hours. The test sample is then weighed to calculate the Total Mass Loss (TML), which may not exceed 1.0% of the total initial mass. A collector plate is used to determine the Collected Volatile Condensable Material (CVCM), which may not exceed 0.1% of the total original specimen mass. SuperSeal™ connectors contain nonmetallic materials such as rubber, plastic, adhesives and potting compounds which can give off gases when subjected to a vacuum or high heat. Unless the connector is specially processed, the TML and CVCM can exceed allowable limits. Glenair is able to offer a bakeout process, 48 hour oven bakeout at 257° F, which assures all materials comply with ASTM E595

### UL 94 V-0 Flammability Standard

#### MOD CODE 928

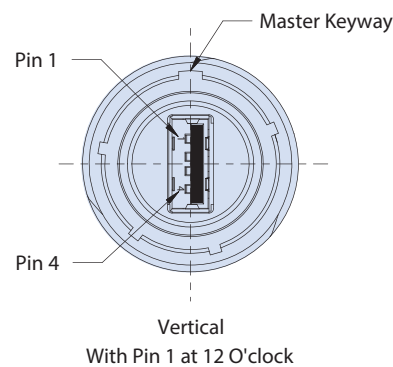
- SuperSeal® connectors specially processed to meet UL 94 V-0 flammability standard

UL 94, the Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing is a plastics flammability standard released by Underwriters Laboratories of the USA. The standard classifies plastics according to how they burn in various orientations and thicknesses. From lowest (least flame-retardant) to highest (most flame-retardant) V-0. Burning stops within 10 seconds on a vertical specimen; specimens may not drip flaming particles.

### Flip Vertical USB Orientation by 180 degrees

#### MOD CODE 915

Flip standard, vertically oriented USB designs 180 degrees, allowing pin 1 to be located at the 12 O'clock position.



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