

# USBFTV

Receptacles with 360° EMI backshells stand off receptacles



USBFTV Receptacles series with EMI backshells provide 360° shielding: same protection than the one proposed per Standard MIL-DTL-38999 serie III Connectors. We offer these EMI backshells with square flange and jam nut receptacles. The available platings are nickel or olive drab cadmium.

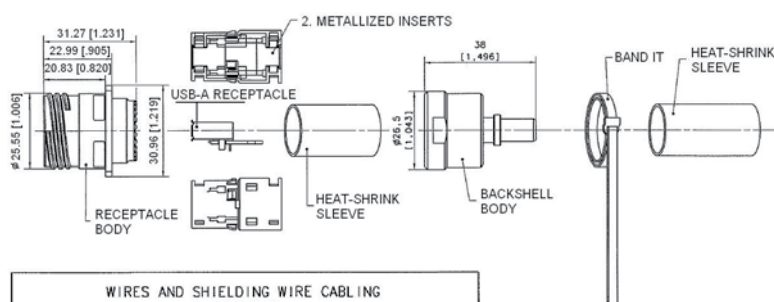
With those solutions we suggest using our reinforced USB cable (shielded – zero halogen jacket). See page 33.

We can provide those receptacles:

- with cordset already soldered
- without cordset

## RECEPTACLES WITH 360° EMI BACKSHELLS

### EXAMPLE WITH A SQUARE FLANGE RECEPTACLE (PROVIDED WITHOUT CABLE)



WIRES AND SHIELDING WIRE CABLING ON THE PCB	
	WIRES
1	RED AWG24
2	WHITE AWG28
3	SHIELDING WIRE AWG28
4	GREEN AWG28
	BLACK AWG24

#### PART NUMBERS:

Jam nut receptacle – Nickel: **KIT40245**

Jam nut receptacle – Olive Drab Cadmium: **KIT40245G**

Square flange receptacle – Nickel: **KIT40263**

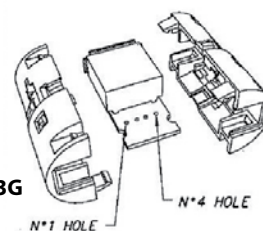
Square flange receptacle – Olive Drab Cadmium: **KIT40263G**

#### IMPORTANT NOTE

With receptacles provided without cable, customer will have to solder his cable on the PCB, please find below the cabling specification.

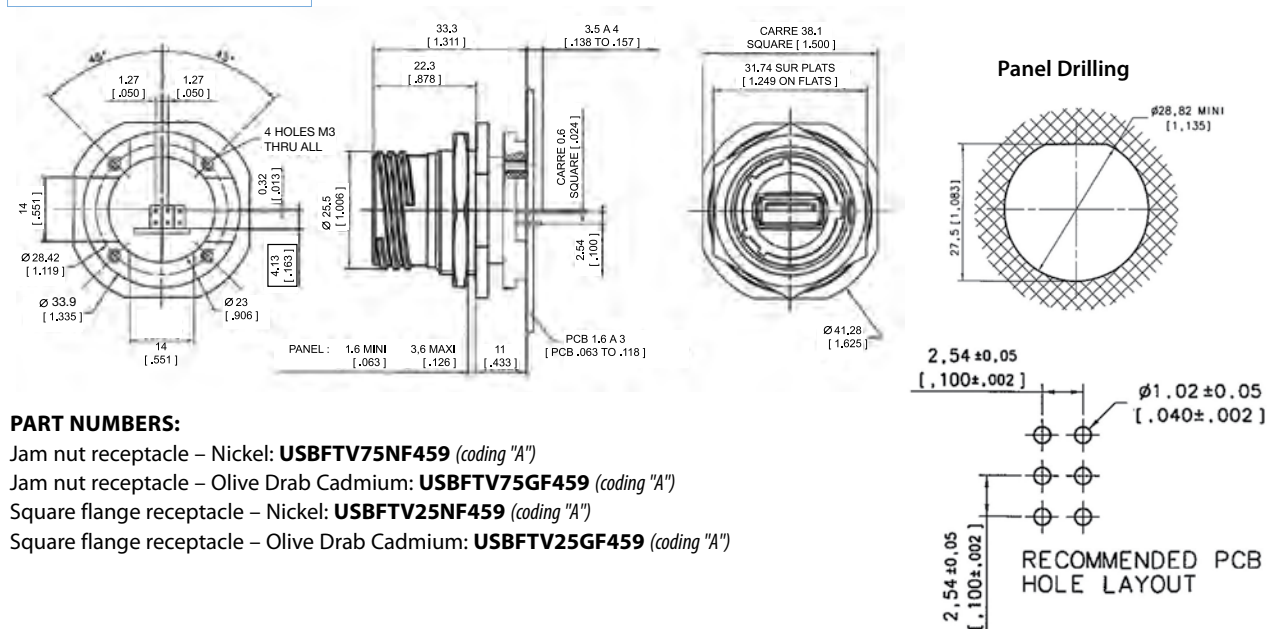
If customer prefers to use his cable, please check with us compatibility with our EMI backshells:

[www.usbfield.com](http://www.usbfield.com)



#### STAND OFF RECEPTACLE

Those receptacles can be soldered directly on your PCB. A compound insures a transversal sealing and good performance in high-vibration environments. The shell of these receptacles are in the « Stand Off » style. They can be connected with rugged USBFTV series plugs.





# USBBF TV (USB-B)

USB Connection System for Harsh Environment



## Applications

- Embedded Computers
- Data Acquisition and transmission in harsh environment
- Railways
- Battelfield Communication Systems
- Navy Systems

## USB Field allows you to use a standard USB 2.0 connection in harsh environments :

- Sealed against fluids and dusts (IP68)
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required
- Improved EMI protection
- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device
- Plug retention in the receptacle: 100N in the axis
- Mating cycles: 500 to 1500

## Back terminations available:

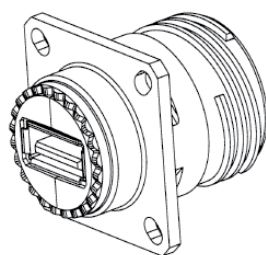
- a USB-A receptacle
- solder: 4 tinned holes on the PCB to solder your wires

## Part Number Code

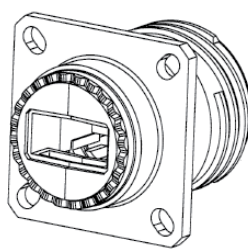
Series	USBBF TV	2	1	G
<b>USBB Field TV</b>				
<b>Shell Type</b>				
6: Plug				
2: Square flange receptacle				
2PE: Square flange receptacle with metal backshell (type 1) & with metal backshell + plastic gland (type 2)				
2PEM: Square flange receptacle metal gland (only for soldering back termination type 2)				
7: Jam nut receptacle				
7PE: Jam nut receptacle with metal backshell (type 1) & with metal backshell + plastic gland (type 2)				
7PEM: Jam nut receptacle metal gland (only for soldering back termination type 2)				
<b>Back Terminations (Receptacles only)</b>				
1: Female USB-A				
2: Solder (4 tinned holes)				
<b>Shells Material &amp; Finish</b>				
N: Aluminium shell - Nickel plating - ROHS compliant				
G: Aluminium shell - Olive Drab Cadmium plating				

Examples: - Plug-cadmium plating: USBBF TV 6G  
- Square Flange Receptacle-USB-A back terminat° -cadmium plating: USBBF TV 21G  
- JamNut Receptacle, solder terminat° -nickel plating: USBBF TV 72N

## Back Terminations



Type 1: Female USB-A



Type 2: Solder (4 tinned holes)

