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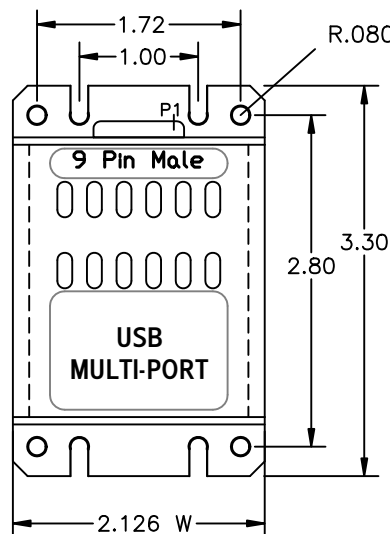
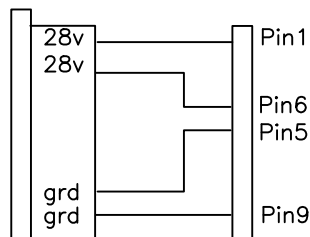
USB MULTI-PORT CONVERTER

COTS Design Standards

Harness Connector:
Lone Star Kit : LS03-05026E
Female Pins Only: 2050901
Connector Only: 170-009-272L000
Crimping Tool: 58448-2
Insertion/Extraction Tool: 91067-2
20 AWG MAX
7.5A PER CONTACT MAX

AC System
14-28 vdc

Multi-PORT
9 PIN Male



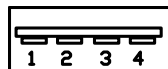
R.080 - 6-32 x 8 x (4) pls

Mounting Hardware Table		
Item	Description	Quantity
1	AN 526 Screw 6-32 R	4
2	AN 960 Washer	4
3	AN356-632- Locknut	4

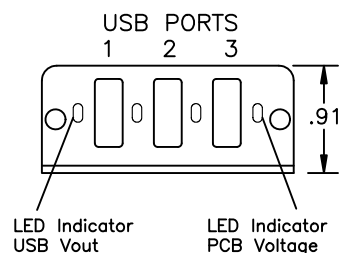
USB PIN OUT

PIN	NAME	CABLE COLOR	DESCRIPTION
1	VCC	RED	+5 VDC
2	D-	WHITE	2.7 VDC
3	D+	GREEN	2.7 VDC
4	GND	BLACK	GROUND

USB FEMALE
RECEPTACLE



Custom extrusions or
mounting options available
for use in Seating, Panel,
and other Custom
applications.



REVISION BLOCK					
REV	ECN #	ZONE	DESCRIPTION OF CHANGE(s)	DATE	APPROVED
REV-0	N/A	N/A	Initial Release	7-21-14	JRM
REV-1			Updated Connector Information	15Oct14	JRM

Converter Circuit Protections:
The dc converter is protected by the following circuit protections designed into the power supply circuit itself.
1. Under voltage protection
2. Over voltage protection
3. Over current
4. Over Temp
5. Reverse Polarity-pcb
6. Input Fuse: Resettable

Part Number: **LS03-05023**
Input Voltage: 10-40vdc
Input Current: 2.5A max input
Output Voltage: 5.3vdc
Output Current: 2.4A Per Port
Connector: 9 pin male -Multi-port
Connector: 9 pin female-harness
Harness Length: 36 inches est.

Product Specifications:
Input Voltage: 10-40 vdc
Output: 5.3 vdc
Physical Dimensions: 2.30 x 2.13 x .935
Weight: 100 grams
Maximum Temp: +70C (+158F)
Minimum Temp: -55C (-67F)
Maximum Altitude: 50,000 Feet
Vibration: Section 8, Cat S, 15G
Shock: 15G
Humidity: 95-100%, 50°C ±3°C
EMI: 90KHz-1500MHz, >200µV
Load: +/-2%
Line: +/-3%
Flammability: UL94-V-0
Efficiency: 90%
Testing: TSO-C71 (Pending)
RTCA-DO160G

FAA AC 43.13: Aircraft Mods, Alterations

FAA AC 20-173: Installation of EFBs


FAA AC 120-76B: Operational use of EFBs

FAA AC 91-78: Use of Class I or II EFBs

Mounting Limitations:
Mount DC Converter in electronics bay or cabin equipment rack near on board avionics equipment or electronics. Mount Converter vertical or horizontal on aluminum frame for maximum heat dissipation.

USB Charger Applications:
Electronic Flight Bag (EFB)
Charger, rated for Class I, Class II and Class III, and Type A and Type B EFB Hardware. Works with most Personal Electronic Devices (PED). USB 2.0 Std.

COTS Design (commercial off the shelf) power supply.

ITEM #	QTY.	PART NO.	DESCRIPTION
UNLESS NOTED OTHERWISE TOLERANCE BLOCK: DIMENSIONS ARE IN INCHES DECIMALS ±1° ANGULAR XX ±.030 XXX ±.015 XXXX ±.0005 DO NOT SCALE DRAWING			
<div>  <p>LONE STAR AVIATION CORP. Mansfield, Texas</p> </div>			
TITLE: USB Multi-Port Charger			
APPROVALS		DATE	
DRAWN BY L DAVIS		3-24-14	
APPROVED BY JRM		3-24-14	
MATERIAL		SIZE A	
FINISH		DRAWING NO. LS03-05023	
NOTE:		REV 1	
NEXT ASSY.		SCALE NONE	
		COMP. FILE	
		SHEET 1 OF 1	