

# **CASCO PRODUCTS CORPORATION**

**DUAL SMART USB CHARGER 2.4 A**

**&**

**USB BRACKET**

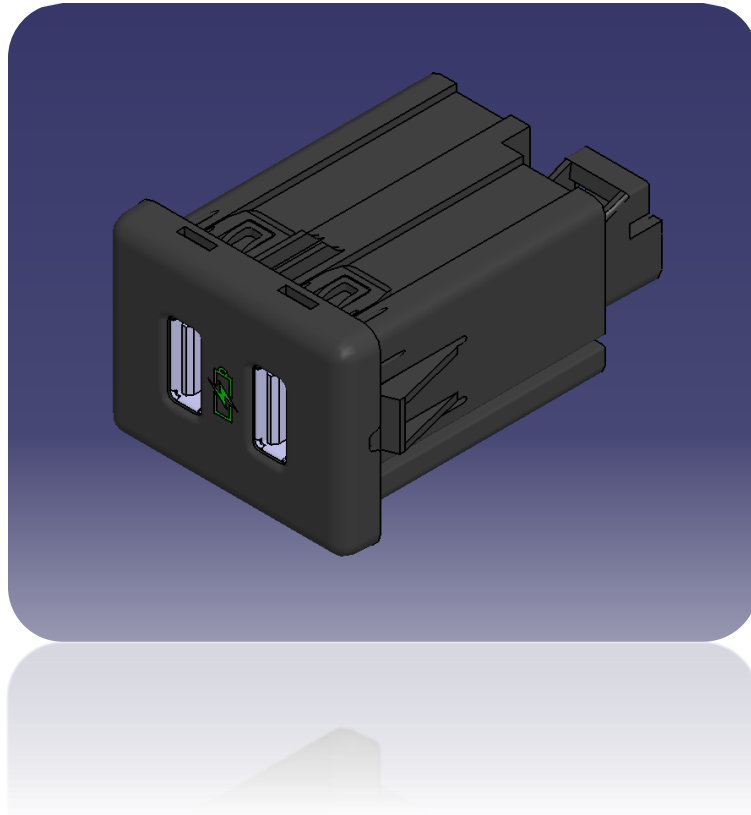
**TECHNICAL MANUAL**



# **SECTION 1**

## **DUAL SMART USB CHARGER**

## 1. Dual Smart USB Charger Overview

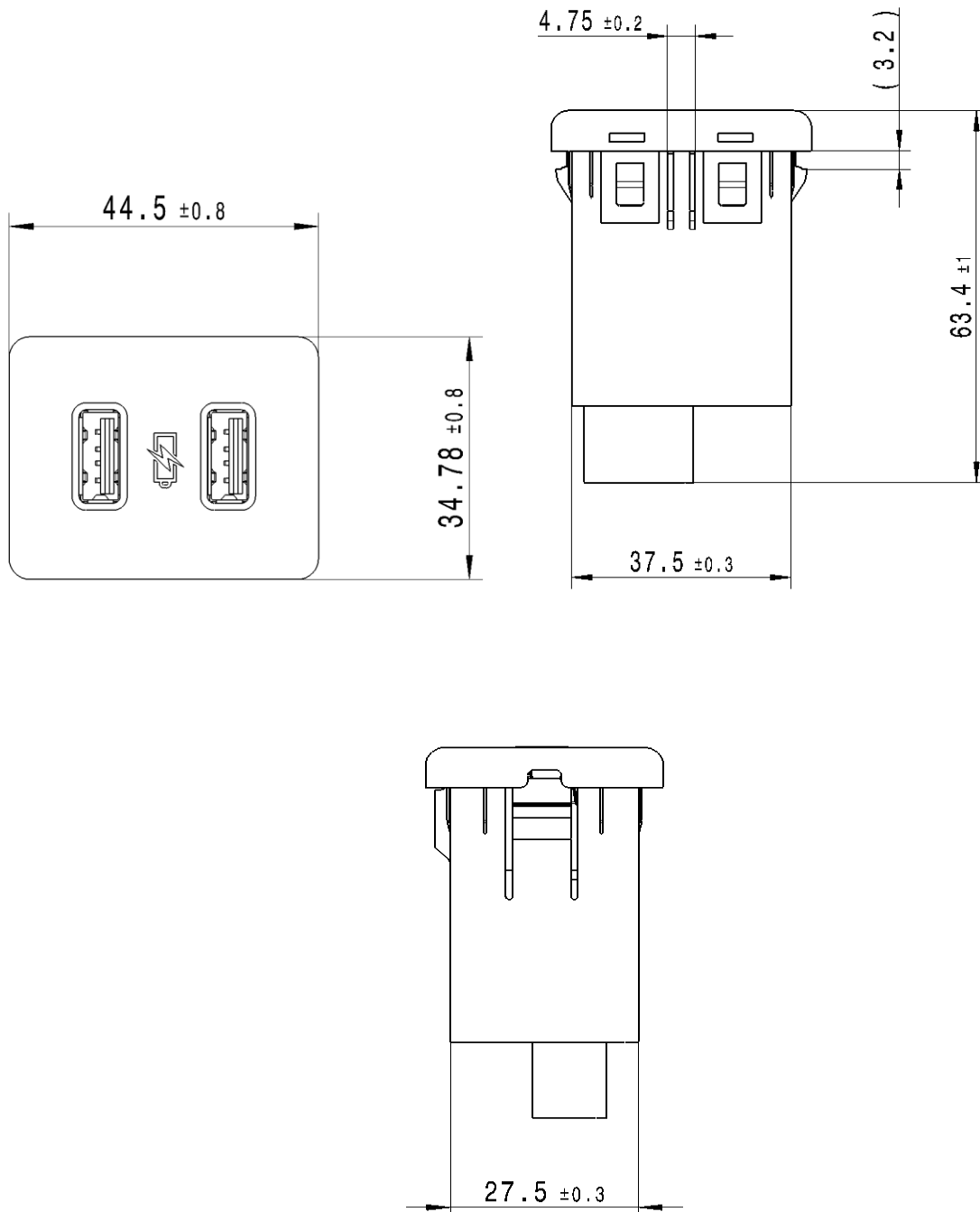


**Dual Smart Charger**

Dual Smart USB Charger Casco Part Number :1073100064

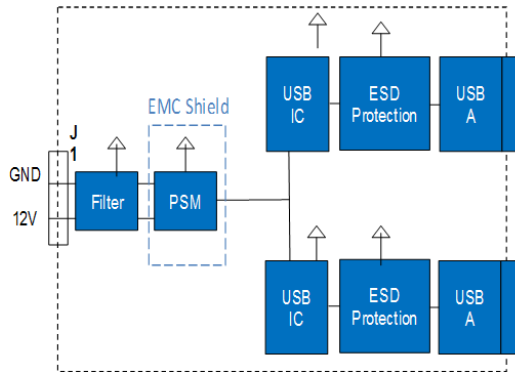
- Off-shelf product offering the latest in USB Charging technology
- Charges all common global cell phone interfaces and iPad/Tablet charging up to 2.4A
- Independent charging – each port at 2.4A (i.e. can charge 2 Tablets)
- Low quiescent current allows for charger to be connected to battery

## 2. Mechanical Specifications



### 3. TECHNICAL SPECIFICATION

#### Block diagram



J1 Mating Connector: Delphi 12052832

- Supports all commonly known charging profiles, enabling optimal device charging rates
- Charges two devices simultaneously at optimal current, up to 2 x 2.4A
- Integrated ESD protection to protect against damage from electrical static discharge
- Power supply unit with built in over and reverse voltage protection
- Tuned and shielded for low radiated emissions, preventing interference with nearby electronics
- Commonly available, low cost, integrated connector
- Operation across a wide voltage range, from 9 - 16V (12V nominal)
- Over temperature protection prevents damage if used with non-USB compliant devices

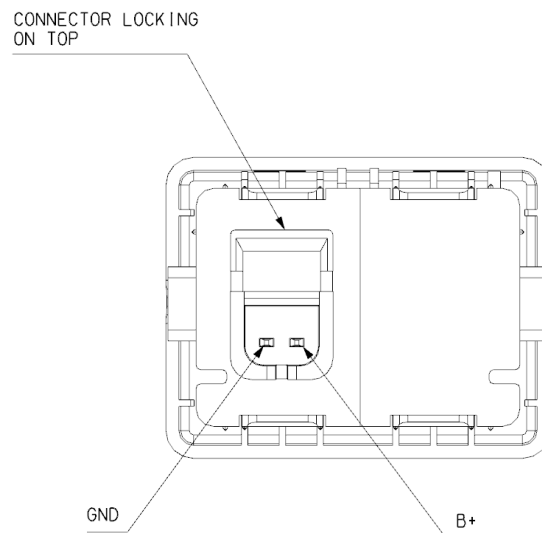
#### Supported Charging Profiles

- BC1.2
- China Telecom YD/T
- Divider 1 Mode
- Divider 2 Mode
- Divider 3 Mode
- 1.2V Divider Mode

### 4. PERFORMANCE SPECIFICATIONS

Jump Start	Withstand 26.0V for 1 minute without performance degradation
Reverse Polarity	Withstand -13.5V for 1 minute without performance degradation
Operating Voltage Range	Maintain operation across 9 to 16V range without performance degradation
Operating Temperature Range	Maintain operation across -40 to +85C range without performance degradation
Storage Temperature	Withstand 500 hours at +95C without performance degradation
Vibration	Withstand 50 hours of random vibration at 19m/s <sup>2</sup> in X, Y and Z directions without performance degradation
Humidity	Withstand 10 days at +65C and 90%RH without performance degradation

## 5.MATING CONNECTOR DETAILS:

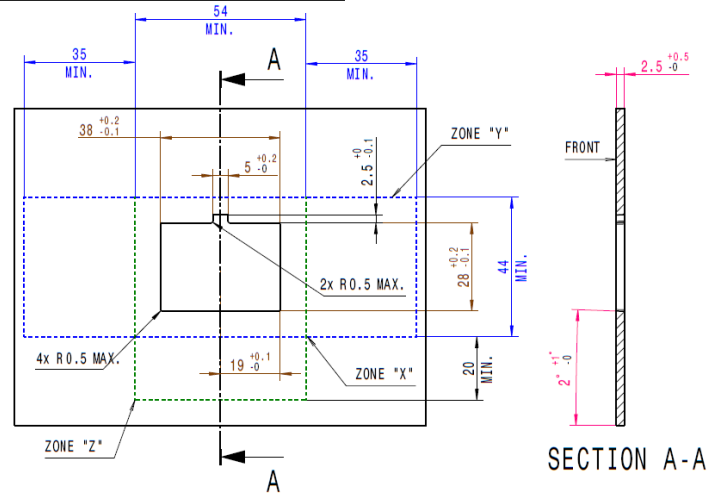


Molded in connector: Delphi 12186848

Harness connector: Delphi 12052832

## 6.MOUNTING PANEL SPECIFICATIONS

This drawing is confidential and the information disclosed herein contains proprietary data of CASCO PRODUCTS CORPORATION, neither this document nor this information disclosed herein shall be reproduced or transferred to other documents or to be used for manufacturing purposes or disclosed to others for any purpose except as specifically authorized in writing by CASCO PRODUCTS, A subsidiary of SEDQA CORPORATION.



### NOTES:

- THE REAR PANEL SURFACE SHALL BE UNIFORMLY FLAT WITHIN AN AREA 5mm FROM THE HOLE EDGE.
- THE FRONT PANEL SURFACE "A" SHALL NOT EXCEE 0.3mm IN A RAISED DIRECION FROM THE PANEL HOLE SURFACE WITHIN ZONE "Y".
- CLEARANCE ZONE "Y" IS FOR USE OF AN ETRACTION TOOL AND ZONE "X" IS FOR FLATNESS OF THE PANEL.
- CLEARANCE ZONE "Z" IS FOR A PULL OFF DUSTCOVER.

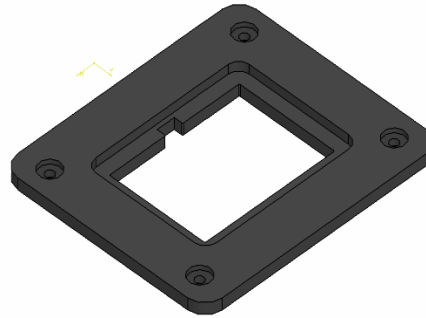
### MOUNTING PANEL SPECIFICATION

## **SECTION 2**

# **MOUNTING BRACKETS**



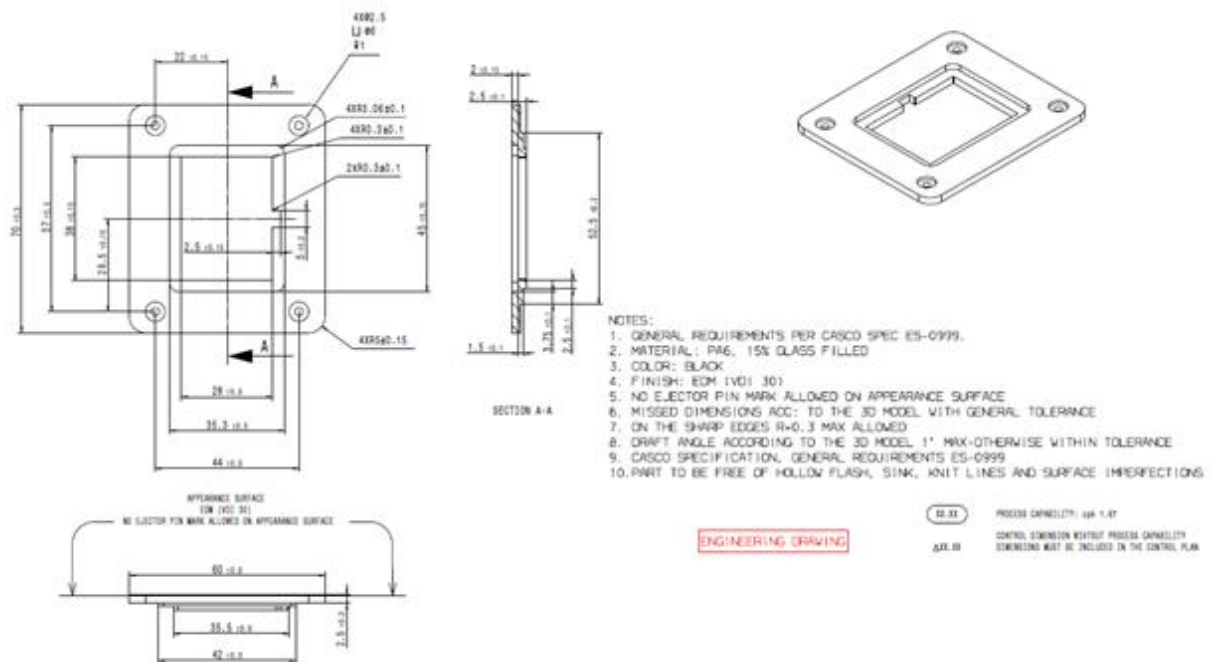
## 2.1 FLUSH MOUNT BRACKET FOR DUAL SMART CHARGER



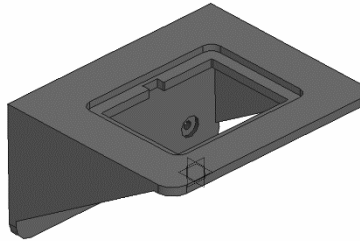
3D VIEW FLUSH DASH (IP) MOUNT BRACKET

Flush Mount USB Bracket Casco Part Number:1073200090

## 2.2 SPECIFICATION OF FLUSH MOUNT BRACKET



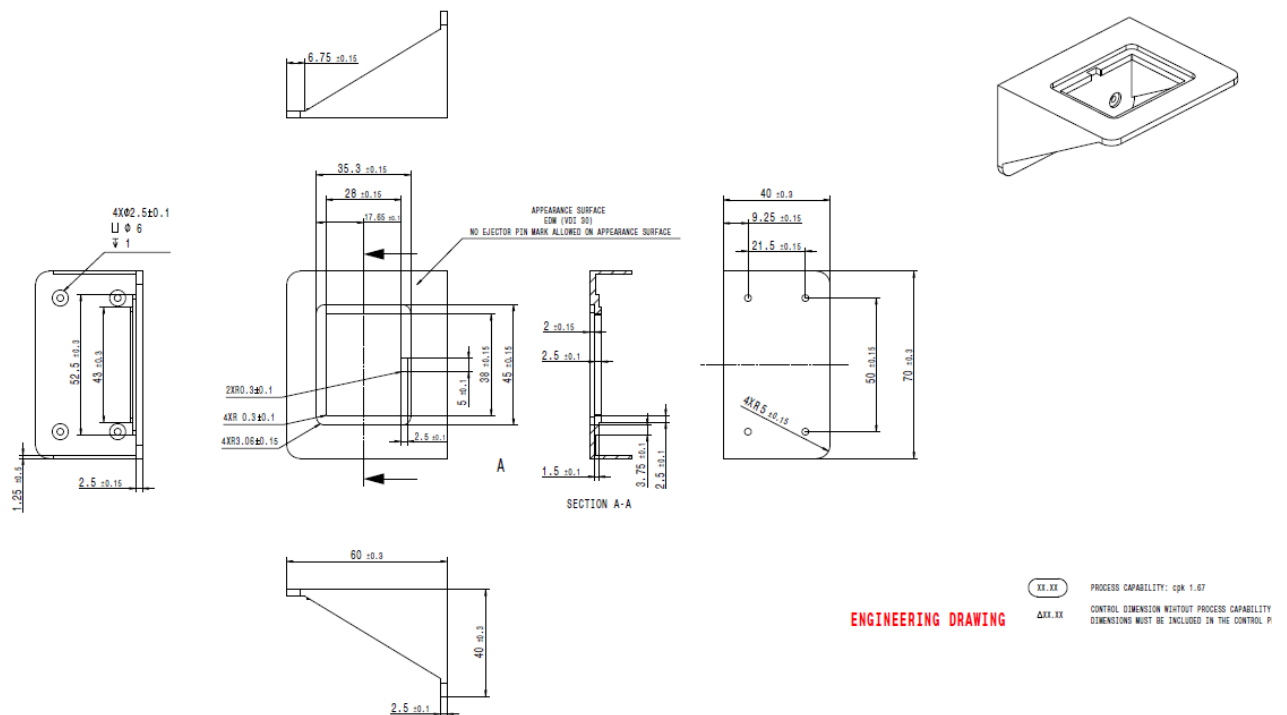
## 2.3 UNDER DASH (IP) MOUNT BRACKET FOR DUAL SMART CHARGER



3D ISO METRIC VIEW UNDER DASH (IP) MOUNT BRACKET  
Note: All technical specifications are included in the next version for the manual.

Under Dash (IP) Mount USB Bracket Casco Part Number:1073200091

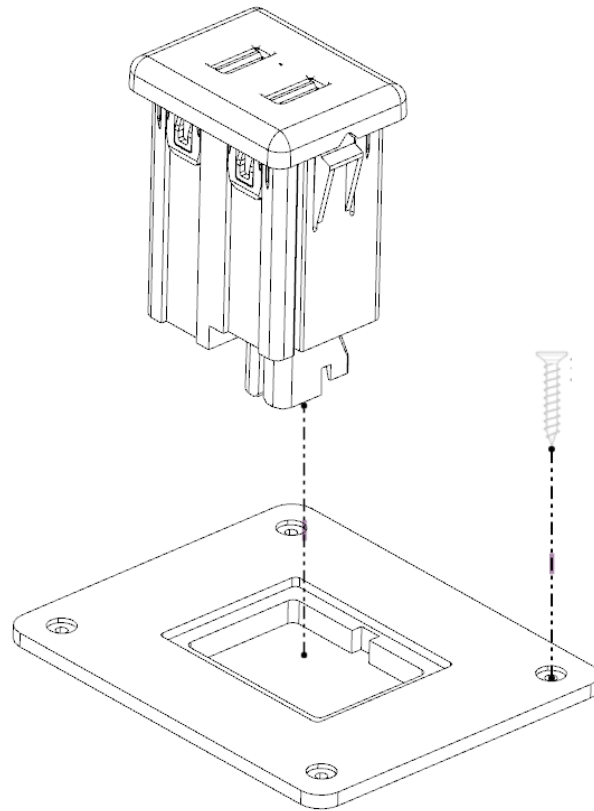
## 2.4 SPECIFICATION OF UNDER DASH (IP) MOUNT BRACKET



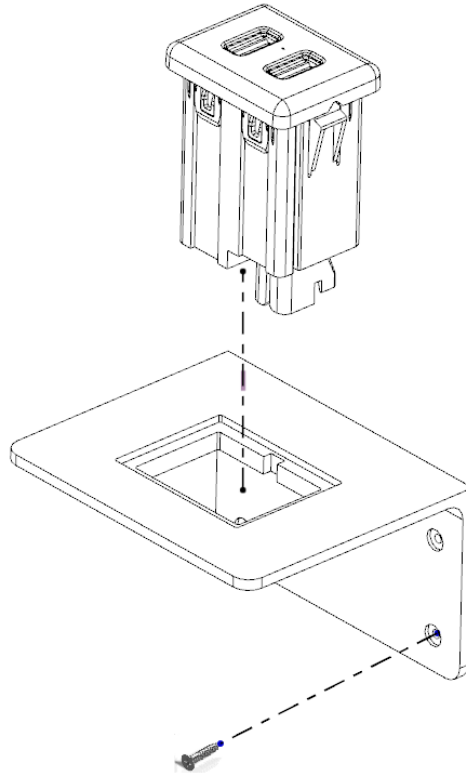
## **SECTION 3**

# **INSTALLATION INSTRUCTIONS**

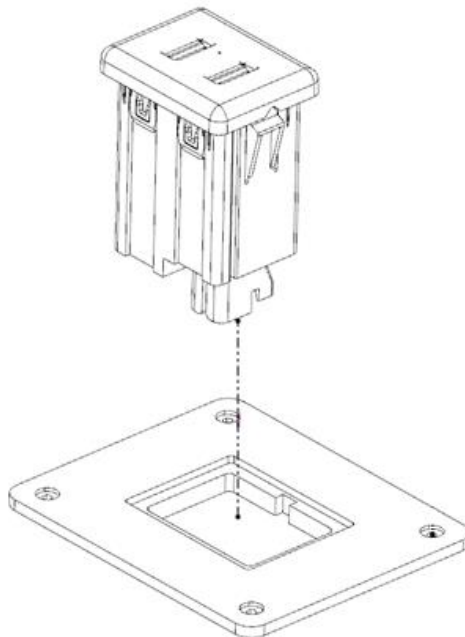
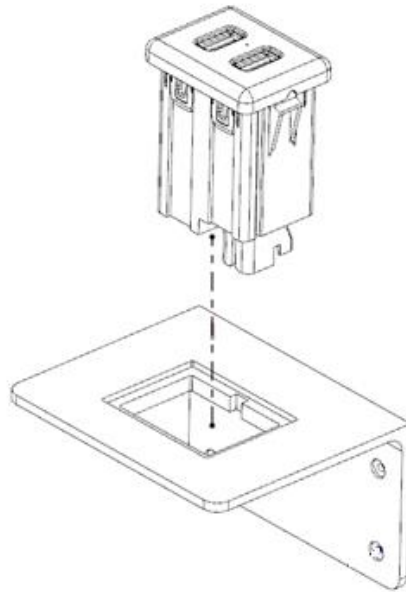
## 3.1 USB FLUSH MOUNT INSTALLATION INSTRUCTIONS



## 3.2 USB UNDER DASH (IP) MOUNT INSTALLATION INSTRUCTIONS

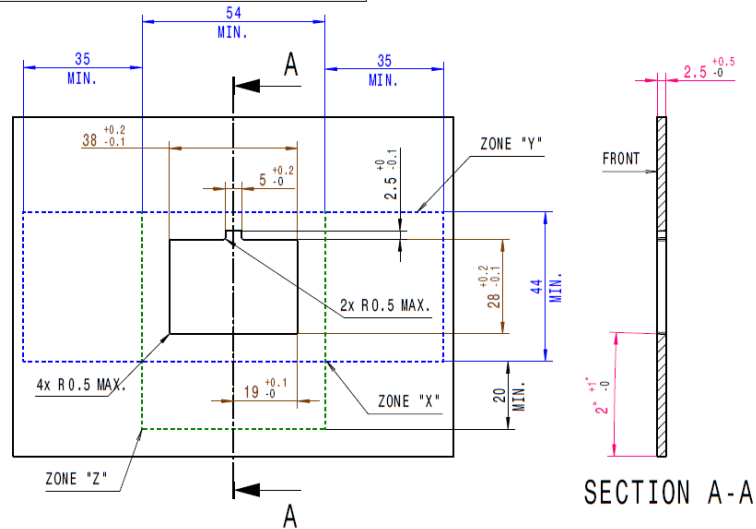


### 3.3 USB UNDER DASH/ IP MOUNT GENERAL INSTALLATION INSTRUCTIONS



### 3.4 USB UNDER DASH/ IP MOUNTING REQUIREMENTS

This drawing is confidential and the information disclosed herein contains proprietary data of CASCO PRODUCTS CORPORATION, neither this document nor this information disclosed herein shall be reproduced or transmitted to other documents or to be used for manufacturing purposes or disclosed to others for any purpose except as specifically authorized in writing by CASCO PRODUCTS, A subsidiary of SEQUA CORPORATION.



**NOTES:**

- THE REAR PANEL SURFACE SHALL BE UNIFORMLY FLAT WITHIN AN AREA 5mm FROM THE HOLE EDGE.
- THE FRONT PANEL SURFACE "A" SHALL NOT EXCEE 0.3mm IN A RAISED DIRECTION FROM THE PANEL HOLE SURFACE WITHIN ZONE "Y".
- CLEARANCE ZONE "Y" IS FOR USE OF AN ETRACTION TOOL AND ZONE "X" IS FOR FLATNESS OF THE PANEL.
- CLEARANCE ZONE "Z" IS FOR A PULL OFF DUSTCOVER.

**MOUNTING PANEL SPECIFICATION**

## OPERATING INSTRUCTIONS

- ✓ Do not plug any cables to USB device under wet conditions.
- ✓ Operate in dry environment.
- ✓ Do not over load device, it is designed for 2.4A.
- ✓ check for loose connection.
- ✓ Make sure that there are no loose screws or other components inside the vehicle.
- ✓ Follow all 29 CFR 1926.400; Subpart K procedure.
- ✓ Follow all National Electric Code (NEC) procedure.



**CASCO Products Corporation**

1000 Lafayette Blvd. 3<sup>rd</sup> Floor

Bridgeport CT. 06604

United States

**Contact us @Ray Piepenbring**

E-mail [Raymond.Piepenbring@cascoauto.com](mailto:Raymond.Piepenbring@cascoauto.com)

Phone 203-922-3340