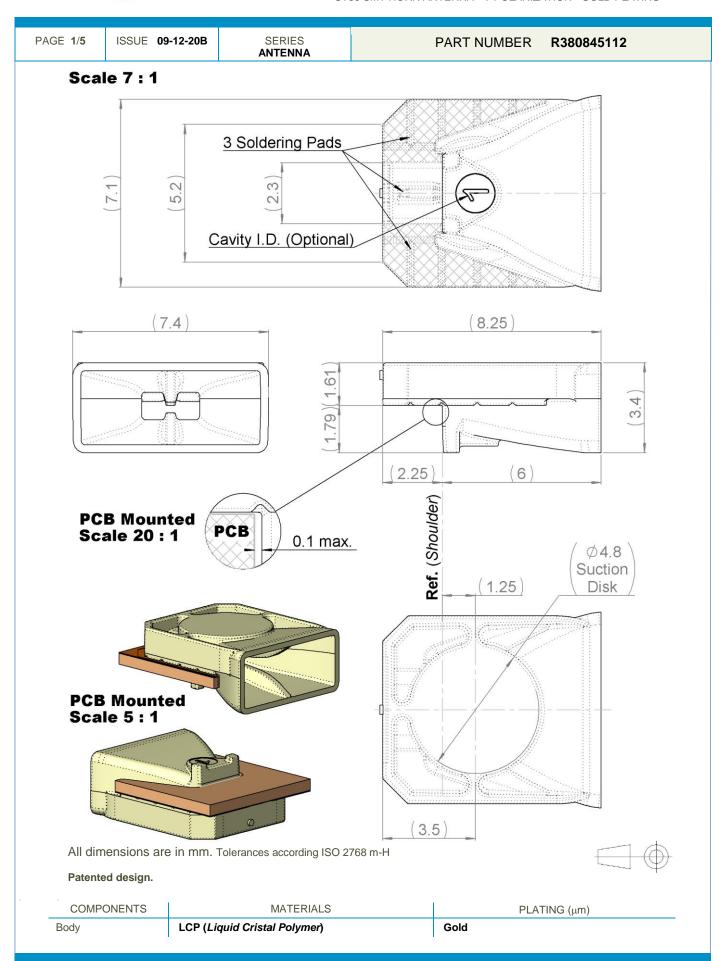




ST60 SMT HORN ANTENNA - V POLARIZATION - GOLD PLATING







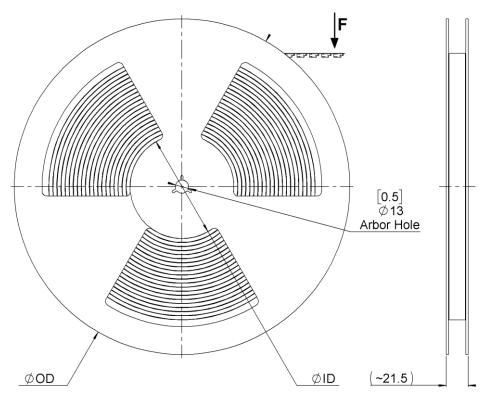
ST60 SMT HORN ANTENNA - V POLARIZATION - GOLD PLATING

| PAGE 2/5 | ISSUE 09-12-20B | SERIE ANTEN | | PART NUMBER | R380845112 | | |
|--|------------------------|-----------------------|--|---|------------------|---------|--|
| ELECTRICAL CHARACTERISTICS | | | MECHANICAL CHARACTERISTICS Weight 0.12 g ±15% | | | | |
| Frequency Band | | | GHz | Overall Dimensions | 8.25 × 7.4 × 3.4 | mm | |
| Nominal Impedant | ce | 50 < -10 | Ω dB (Typ.) | Mounting Type | Edge-Card SMT | | |
| Typical Far-Field Directivity | | > 8 | dBi | ENVIRONMENTAL CHARACTERISTICS | | | |
| Radiation Pattern | | Directional | (Horn) | Extreme Storage Temperature (2) | -20 / +55 | °C | |
| Polarization | ι | inear Vertical | | Recommended Storage (2) (12 Months Shelf Life) (2) | 25 ± 15 | °C | |
| Relative Cross-Po | larization Level | > 20 | dB | , , , , , , , , , , , , , , , , , , , | 30 ~ 60 | %RH | |
| ESD Protection | | DC-Ground | | Reflow Temperature | 260 | °C Max. | |
| (1): Measured on Reference Board (See Application Note | | | Operating Temperature Range | -40 / +85 | °C | | |
| "201910575-10 B_AN.pdf"). | | | ROHS & REACH status | See radiall.com/roh | ıs | | |
| (2): Tape & Reel Packaging Conditions | | | | | | | |

PACKAGING SUFFIX

| | P/N Suffix | Packaging Type | OD | ID | Order Quantity | | |
|-------------|--|----------------|---------|----|----------------|--|--|
| R380845112- | 20 | Large Reel | 15" | 4" | 2000 | | |
| K300043112 | 01 | Small Reel | 7" 2.4" | | 100 | | |
| | Other Packaging Available Upon Reguest | | | | | | |

PACKAGING REEL

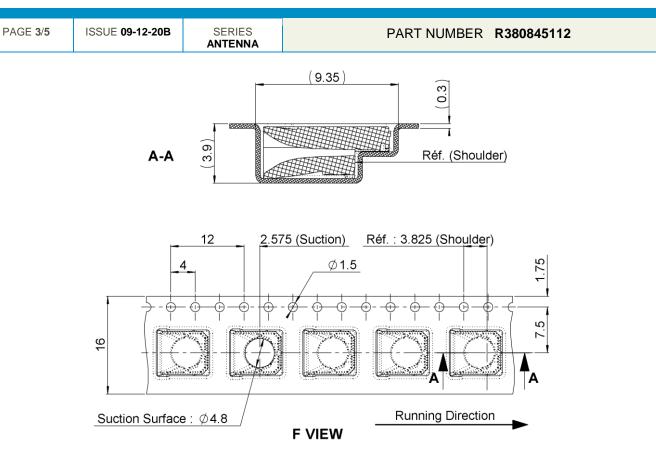


CARRIER TAPE

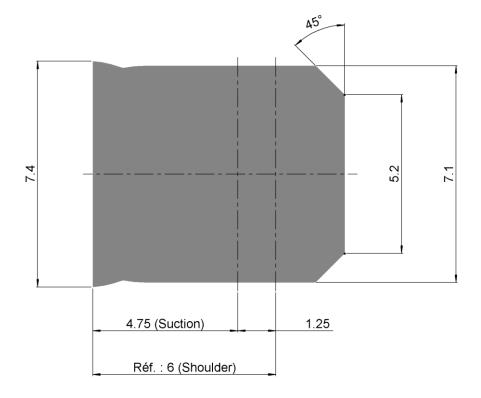




ST60 SMT HORN ANTENNA V POLARIZATION - GOLD PLATING



SHADOW FOR VIDEO CAMERA







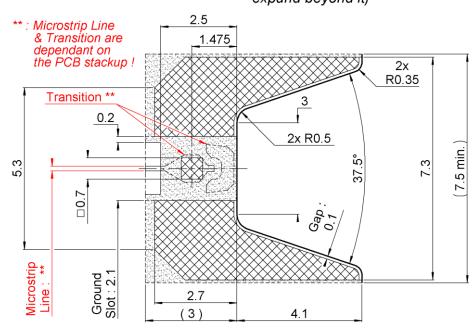
ST60 SMT HORN ANTENNA V POLARIZATION - GOLD PLATING

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TYPICAL SOLDER MASK & PAD

: Solder Mask ———: Board Outline

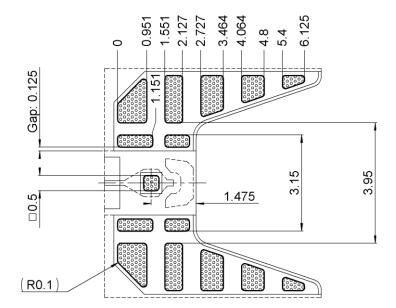
Solder Pad ----: Footprint Limit (The PCB can expand beyond it)



SOLDER PASTE (For 80~100µ Thickness Screens)

: Solder Paste : Board Outilne

----: Screen Limit ----: Footprint Limit (The PCB can expand beyond it)







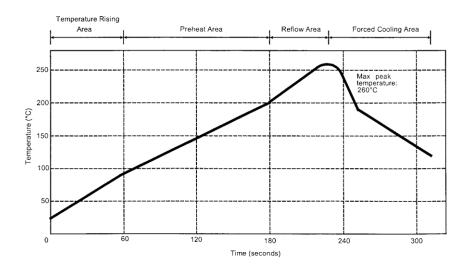
ST60 SMT HORN ANTENNA V POLARIZATION - GOLD PLATING

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|--------------------------|------------------------|-------------------|-------------------------------|
|--------------------------|------------------------|-------------------|-------------------------------|

SOLDER PROCEDURE

- 1. Deposit solder paste 'SnAg4Cu0.5' (*T4 or T5*) on mounting zone by screen printing application. We recommend a low residue flux. We advise a thickness of 80 to 100 µm (*3,150 to 3,940 mils*). Verify that the edges of the zone are clean.
- 2. Placement of the receptacle on the mounting zone with an automatic machine of 'pick and place' type. A video camera is recommended for positioning of the component. Adhesive agents must not be used on the receptacle.
- 3. This process of soldering has been tested with convection oven .Below please find, the typical profile to use.
- 4. The cleaning of printed circuit boards is possible, but not mandatory.
- 5. Verification of solder joints and position of the component by visual inspection (*Component centered on pads, with 100μm max. gap between its shoulder & PCB edge*).

TEMPERATURE PROFILE



| Parameter | Value | Unit |
|----------------------------------|-----------|--------|
| Temperature rising Area | 1 - 4 | °C/sec |
| Max Peak Temperature | 260 | °C |
| Max dwell time @260°C | 10 | sec |
| Min dwell time @235°C | 20 | sec |
| Max dwell time @235°C | 60 | sec |
| Temperature drop in cooling Area | -1 to - 4 | °C/sec |
| Max dwell time above 100°C | 420 | sec |