**TAI-SAW TECHNOLOGY CO., LTD.**
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

# Product Specifications Approval Sheet

Product Description: SAW Filter 458.5 MHz SMD 5.0x5.0 mm

TST Part No.: TA1189A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee

Approved by: Francis Chen

Date: 2010/09/14

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.

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## SAW Filter 458.5 MHz

MODEL NO.:TA1189A REV. NO.:1

### A. MAXIMUM RATING:

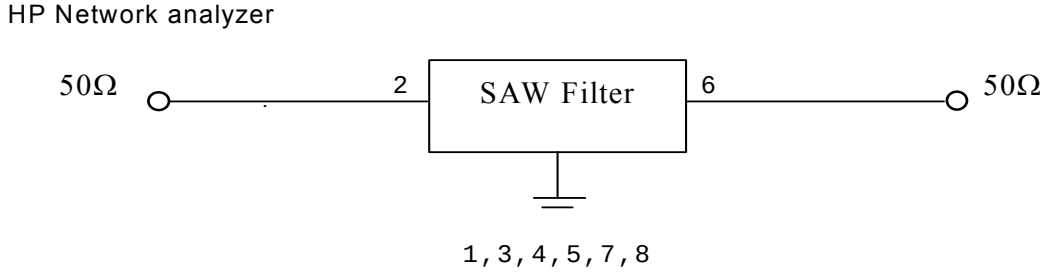
1. Input Power Level: 10 dBm
2. DC Voltage : 5 V
3. Operating Temperature: -30°C to +60°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

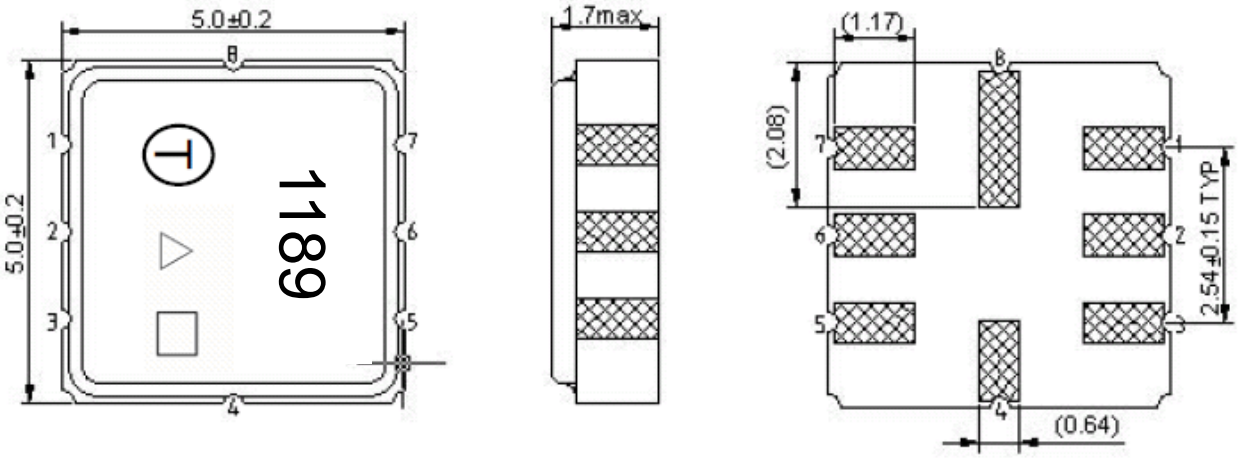
### B. ELECTRICAL CHARACTERISTICS:

| Item | Unit | Min. | Type. | Max. |
|---|---|---|---|---|
| **Center frequency** **Fc** | MHz | - | 458.5 | - |
| **Min. IL Insertion loss** | dB | - | 2.0 | 3.5 |
| **Amplitude Ripple** (448~469 MHz) | dB | - | 0.8 | 2.5 |
| **Return loss** (448~469MHz) | dB | 7 | 11 | - |
| **Attenuation** (Reference level from 0 dB) | | | | |
| 0.3 ~ 300 MHz | dB | 30 | 56 | - |
| 300 ~ 392 MHz | dB | 24 | 48 | - |
| 392 ~ 428 MHz | dB | 15 | 43 | - |
| 500 ~ 536 MHz | dB | 12 | 17 | - |
| 536 ~ 592 MHz | dB | 28 | 55 | - |
| 592 ~ 702 MHz | dB | 24 | 50 | - |
| 702 ~ 1000 MHz | dB | 26 | 50 | - |
| **Temperature Coefficient of Frequency** | ppm/℃ | - | -80 | - |

### C. MEASUREMENT CIRCUIT:



## D.OUTLINE DRAWING:




Pin 2: Input +

Pin 6: Onput +

Pin 1,3,4,5,7,8 : To be Ground

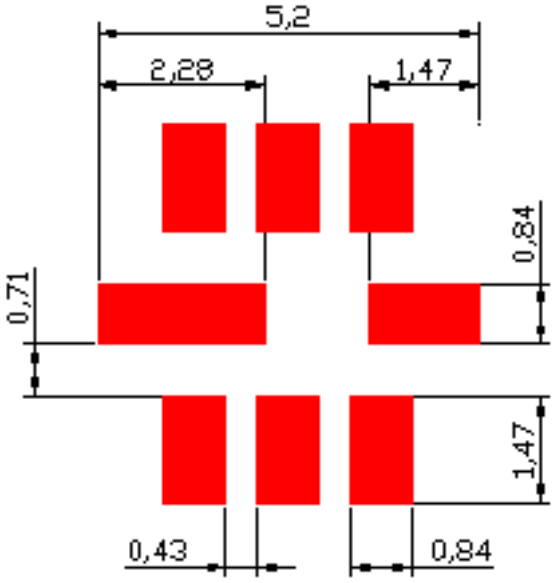
□ : Week Code (Follow the table from planner each year)

Unit : mm

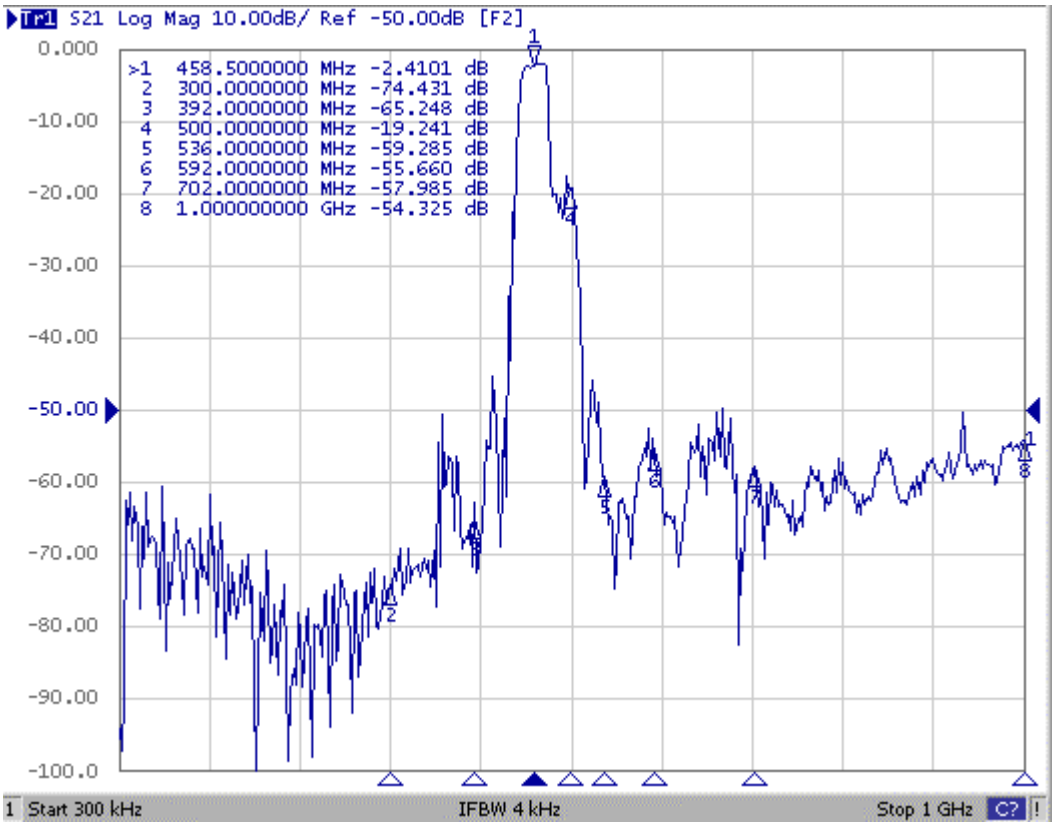
△ : Product / Year Code

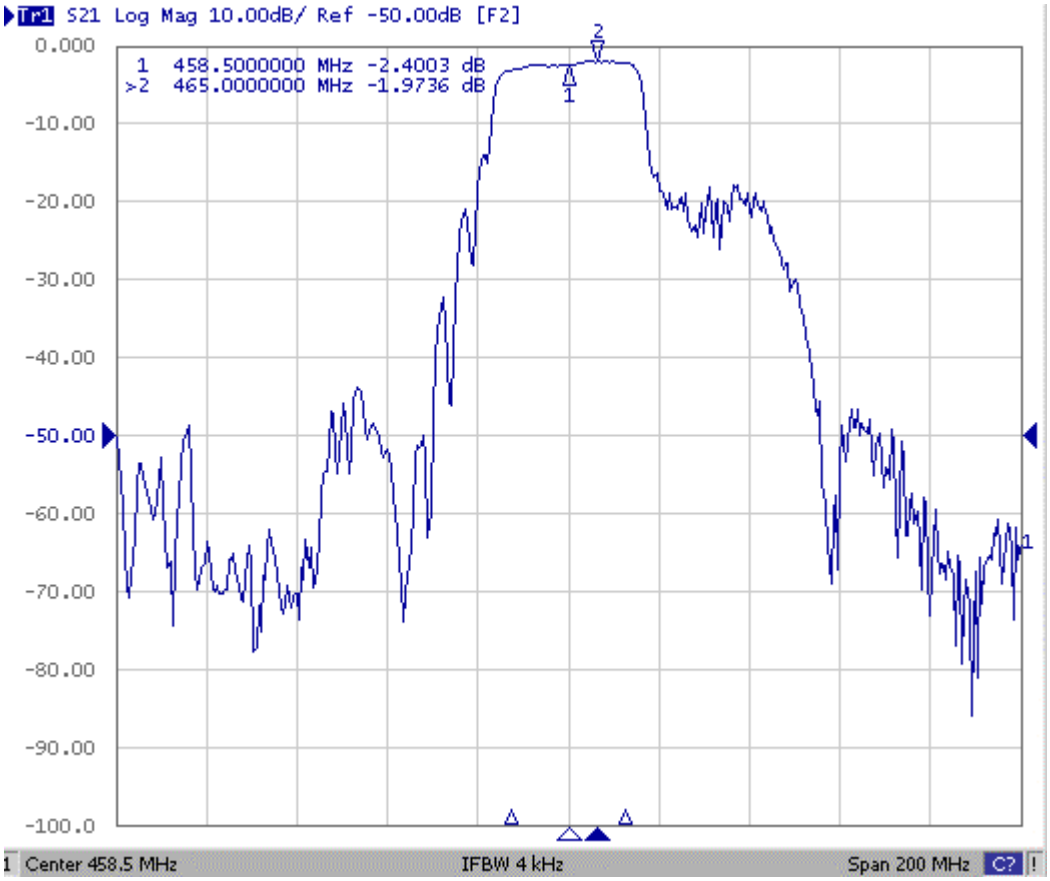
| Year | 2009<br>2013 | 2010<br>2014 | 2011<br>2015 | 2012<br>2016 |
|---|---|---|---|---|
| Product Code | A | a | A | a |

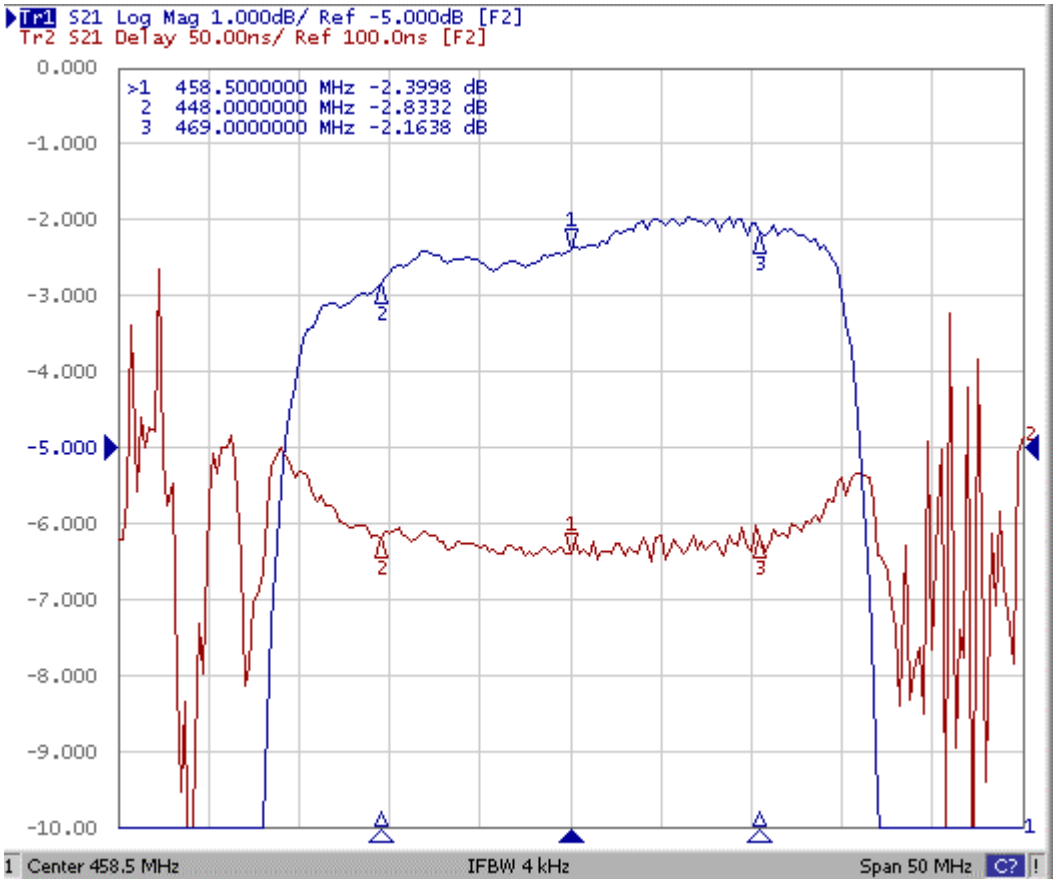
## E. PCB Footprint:

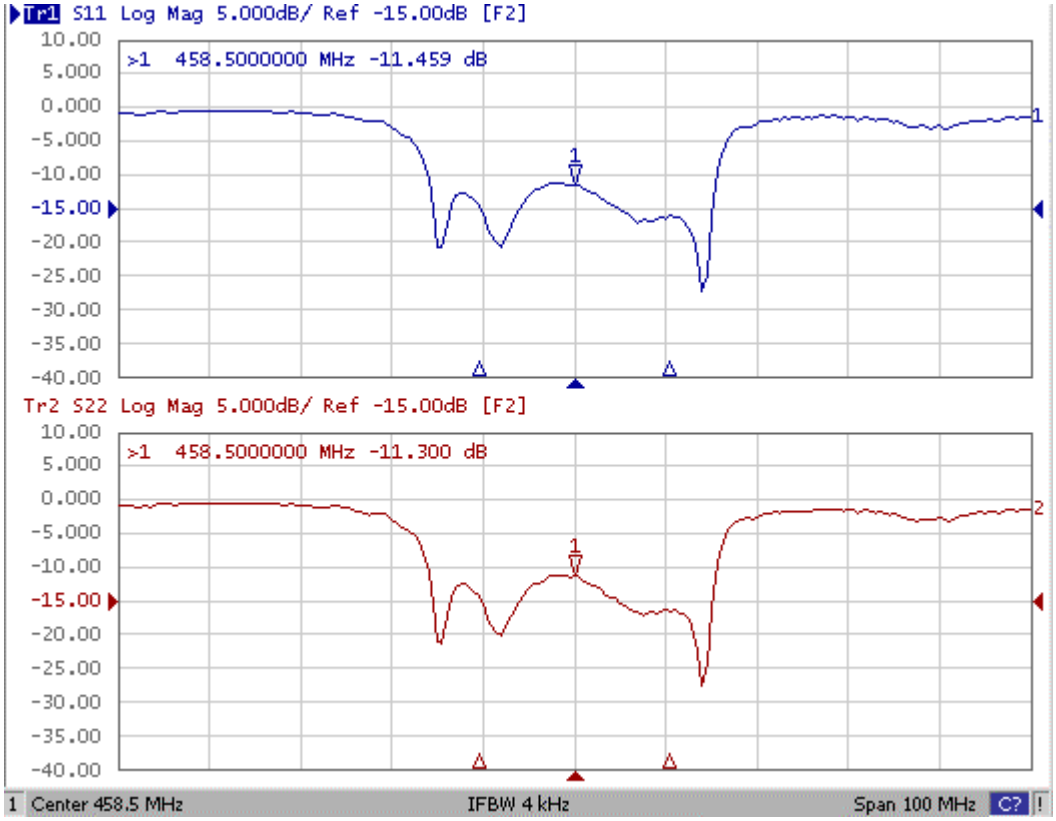


## F. Frequency Characteristics :



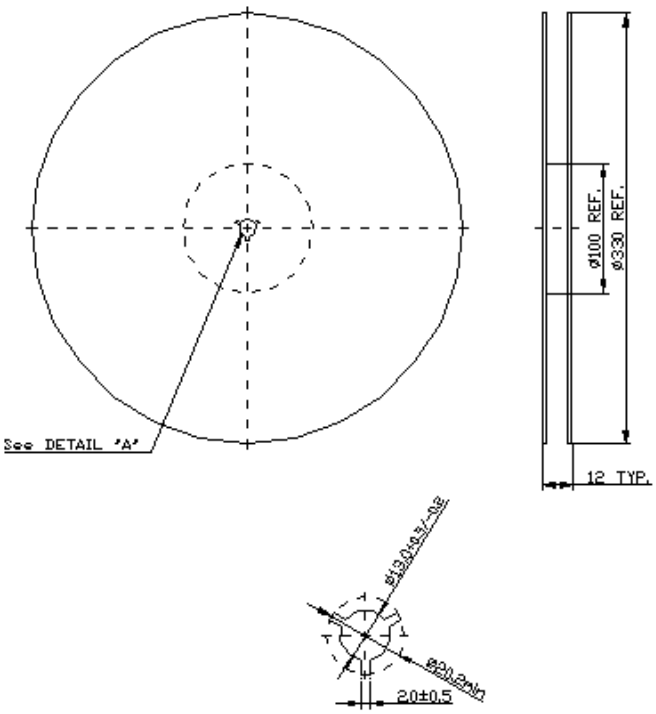




Tr1 S21 Log Mag 1.000dB/ Ref -5.000dB [F2]
Tr2 S21 Delay 50.00ns/ Ref 100.0ns [F2]
>1 458.5000000 MHz -2.3998 dB
2 448.0000000 MHz -2.8332 dB
3 469.0000000 MHz -2.1638 dB
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
-6.000
-7.000
-8.000
-9.000
-10.00
1 Center 458.5 MHz
IFBW 4 kHz
Span 50 MHz
C?
!

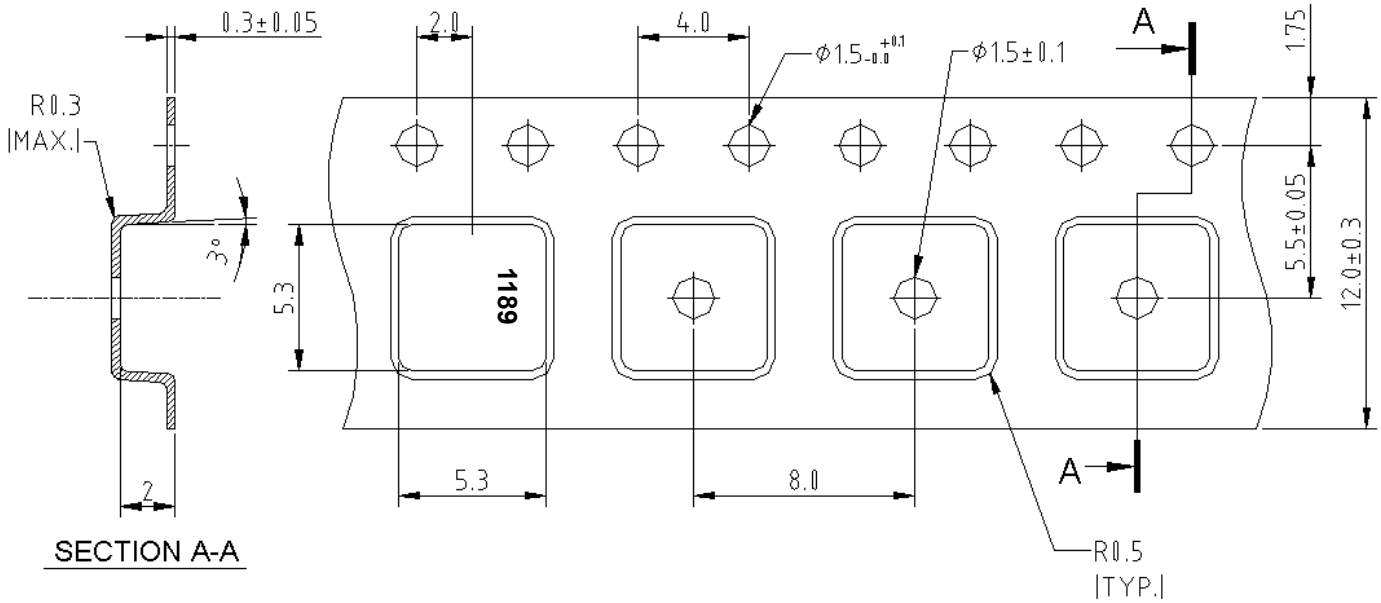
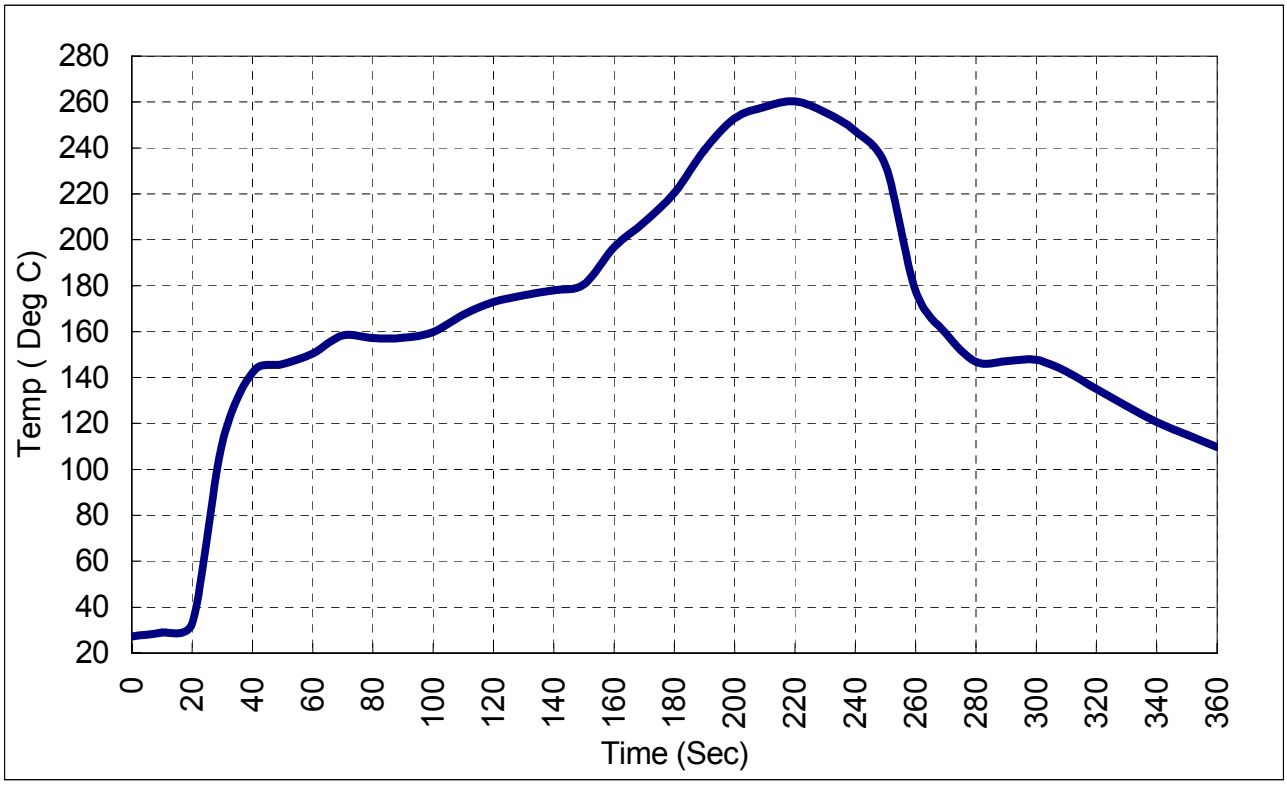

Tr1 S11 Log Mag 5.000dB/ Ref -15.00dB [F2]
>1 458.5000000 MHz -11.459 dB
10.00
5.000
0.000
-5.000
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
Tr2 S22 Log Mag 5.000dB/ Ref -15.00dB [F2]
>1 458.5000000 MHz -11.300 dB
1 Center 458.5 MHz
IFBW 4 kHz
Span 100 MHz
C?
!

## G. PACKING:

1. REEL DIMENSION




2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE :