

Chip Antennas for General Electronic Equipment for Consumer

REFLOW

PART NUMBER

T	S	A	5	N	A	2	K	2	G	4	5	N	S	0	0	1	T	
①				②	③		④		⑤			⑥		⑦			⑧	⑨

①Series

Code (1)(2)(3)(4)	
TSA3	Chip antenna for General Electronic Equipment for Consumer, Dual type
TSA5	Chip antenna for General Electronic Equipment for Consumer, Monopole type
TSA6	Chip antenna for General Electronic Equipment for Consumer, Inverted F type

(1) Product Group

Code	
T	Ceramic RF Device

(2) Category

Code	Recommended equipment	Quality Grade
S	General Electronic Equipment for Consumer	3

②Series name

Code	Series name
N	Standard

③Dimensions (case size)

Code	Dimensions (case size) [mm]
18	1.6 × 0.8
A2	3.2 × 1.6
A4	10.0 × 4.0
A6	8.0 × 6.0

④Thickness

Code	Thickness [mm]
D	0.65max
K	0.5 ± 0.1
L	1.0 ± 0.3

(3) Type

Code	
A	Antenna

(4) Features, Characteristics

Code	
3	Dual type
5	Monopole type
6	Inverted F type

⑤Frequency

Code (example)	Frequency [MHz]
1G57	1574.397 ~ 1576.443
2G45	2400 ~ 2500
5G55	3100 ~ 8000

1. Describe Center Frequency

2. Lower Frequency for Dual band

⑥Electrode type

Code	Electrode type
N	External electrode

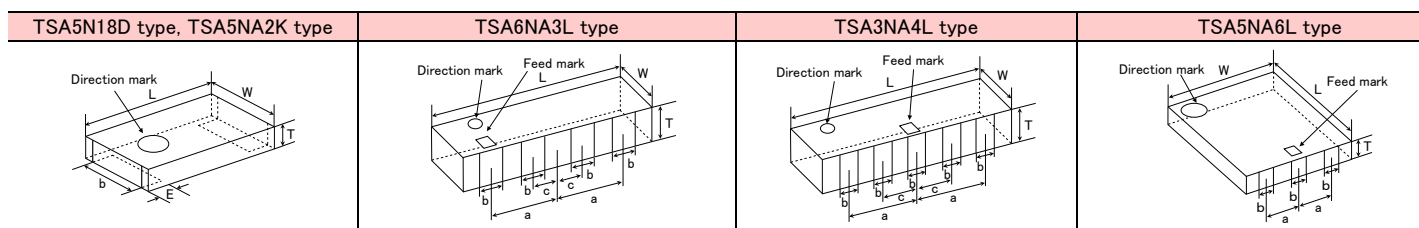
⑦Internal Code

⑧Packaging

Code	Packaging
T	Taping

⑨Internal Code

■ EXTERNAL DIMENSIONS / STANDARD QUANTITY



Type	L	W	T	E	a	b	c	Standard quantity [pcs]
TSA5N18D	1.6 ± 0.1	0.8 ± 0.1	0.65max	0.3 ± 0.1	-	0.6 ± 0.1	-	5000
TSA5NA2K	3.2 ± 0.15	1.6 ± 0.15	0.5 ± 0.1	0.5 ± 0.2	-	1.0min.	-	3000
TSA6NA4L	10.0 ± 0.3	4.0 ± 0.3	1.0 ± 0.3	-	2.5 ± 0.3	1.0 ± 0.3	1.0 ± 0.3	2000
TSA3NA4L	10.0 ± 0.3	4.0 ± 0.3	1.0 ± 0.3	-	3.0 ± 0.3	0.8 ± 0.3	1.5 ± 0.3	2000
TSA5NA6L	8.0 ± 0.3	6.0 ± 0.3	1.0 ± 0.3	-	1.8 ± 0.2	1.0 ± 0.3	-	1000

Unit : mm

■ PART NUMBER

Applications	New part number	Old part number (for reference)	External dimensions (L × W × T) [mm]	Center frequency [MHz]
GPS	TSA5NA2K1G57NS001T	AH 316M157501-T	$3.2 \times 1.6 \times 0.5$	1575
W-LAN (2.4GHz)	TSA5N18D2G45NV001T	AH 168M245001-T	$1.68 \times 0.8 \times 0.65\text{max.}$	2450
Bluetooth®	TSA5NA2K2G45NS001T	AH 316M245001-T	$3.2 \times 1.6 \times 0.5$	2450
ZigBee	TSA6NA4L2G45NS0S1T	AH 104F2450S1-T	$10.0 \times 4.0 \times 1.0$	2450
W-LAN (2.4GHz/5GHz)	TSA3NA4L2G45NS0D1T	AH 104N2450D1-T	$10.0 \times 4.0 \times 1.0$	2450/5400
UWB & WiMAX (3.5GHz)	TSA5NA6L5G55NS003T	AH 086M555003-T	$8.0 \times 6.0 \times 1.0$	5550