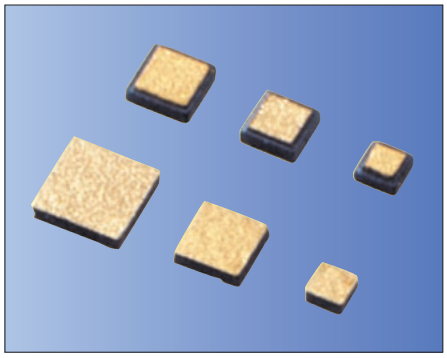
Microwave Capacitors
GH/ GB Series



Pb Free RoHS Compliant

Features

- Maximum capacitance change of ±15% from –55°C to +125°C
- Gold terminations 100µ inches over barrier layer
- Excellent bond strength (MIL–STD–883, method 2011.5)
- Available with and without borders

How to Order

GH	35	5	A	6R8	C	A	6N
①	②	③	④	⑤	⑥	⑦	⑧

① Type Code

GH	No Border	**GB**	With Border

② Case Size

01 to 06	maxi	**10 to 90**	Standard

③ Working Voltage Code

5	50WVDC	**1**	100WVDC

④ Temperature Coefficient

Code	Dielectric	Temperature Coefficient
A	NP0	0±30ppm/ °C
4	N1500	–1500± 250ppm/ °C
7	N3300	–3300±1000ppm/ °C
Y	N4700	–4700±1000ppm/ °C
C	X7R	±15%
Z	X7S	±22%
8	X7R (max)	±15%
9	X7R (maxi+)	±15%

⑤ Capacitance

⑥ Capacitance Tolerance Code

K	±10%	**Z**	+80 to –20%
M	±20%	**P**	+100 to 0%

T=0.178±0.051

⑦ Termination Code

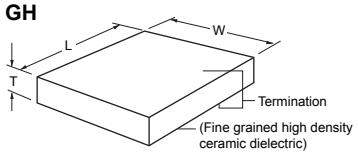
A	Ti/ W+Au	**N**	Ti/ W+Ni+Au

⑧ Packaging Code

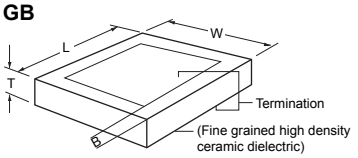
6N	Antistatic Waffle Pack

Case Dimensions

GH



GB



*B=0.051$^{+0.051}_{+0.025}$ mm

GH Series

	GH10 L=0.254±0.076 W=0.254±0.076 T=0.152±0.051	GH15 L=0.381±0.127 W=0.381+0.000;–0.076 T=0.152±0.051	GH20 L=0.508±0.127 W=0.508+0.000;–0.076 T=0.152±0.051	GH25 L=0.635±0.127 W=0.635+0.000;–0.076 T=0.152±0.051	GH35 L=0.889±0.127 W=0.889±0.127 T=0.152±0.051	GH50 L=1.27±0.254 W=1.27±0.254 T=0.152±0.051	GH70 L=1.78±0.254 W=1.78±0.254 T=0.178±0.051	GH90 L=2.29±0.254 W=2.29±0.254 T=0.178±0.051
Dielectric Code	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**
A	0.05–0.60	0.10–1.20	0.20–2.00	0.30–3.00	0.60–6.80	1.30–15.60	1.70–18.00	3.80–29.00
4	0.60–1.70	1.30–3.00	2.60–5.20	4.40–8.00	9.40–18.00	19.00–40.00	25.00–46.00	56.00–73.00
7	1.00–3.00	2.40–5.50	4.80–9.50	8.00–14.00	17.00–32.00	35.00–72.00	45.00–84.00	100.00–130.00
Y	1.80–5.00	4.00–10.00	8.40–16.00	14.00–25.00	30.00–55.00	61.00–130.00	80.00–150.00	180.00–230.00
C	3.4–40.0	7.7–74.0	15.0–130.0	25.0–200.0	55.0–430.0	110.0–980.0	150.0–1100.0	330.00–1800.0
Z	8.00–90.0	11.0–170	23.0–290	39.0–440	90.0–970	130–2200	270–3400	470–5400

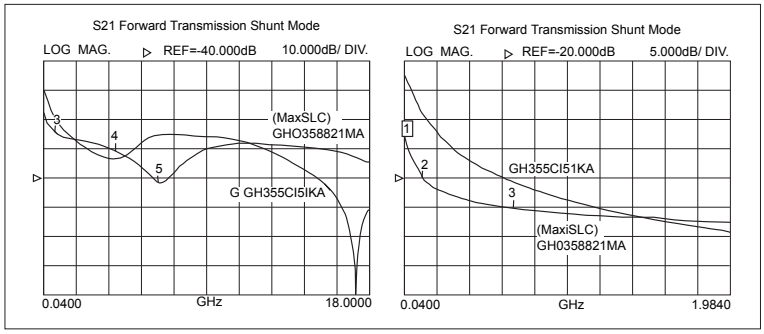
	GH01 L=0.381±0.127 W=0.381±0.127 T=0.178±0.051	GH02 L=0.635±0.127 W=0.635±0.127 T=0.178±0.051	GH03 L=0.889±0.127 W=0.889±0.127 T=0.178±0.051	GH04 L=1.27±0.254 W=1.27±0.254 T=0.178±0.051	GH05 L=1.78±0.254 W=1.78±0.254 T=0.178±0.051	GH06 L=2.29±0.254 W=2.29±0.254 T=0.178±0.051
Dielectric Code	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**
8	68–330	330–750	750–1200	1200–2700	2700–4700	4700–8200
9	330–390	390–1000	1000–1800	1800–3300	3300–6800	6800–10000

GB Series

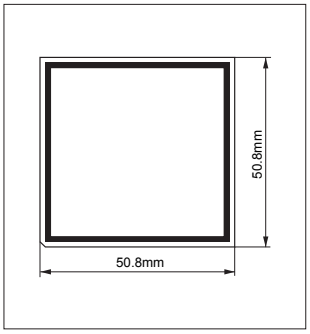
	GB10 L=0.254±0.076 W=0.254±0.076 T=0.152±0.051	GB15 L=0.381±0.127 W=0.381+0.000;–0.076 T=0.152±0.051	GB20 L=0.508±0.127 W=0.508+0.000;–0.076 T=0.152±0.051	GB25 L=0.635±0.127 W=0.635±0.000;–0.076 T=0.152±0.051	GB30 L=0.762±0.051 W=0.762±0.051 T=0.152±0.051	GB35 L=0.889±0.127 W=0.889±0.127 T=0.152±0.051	GB40 L=1.02±0.051 W=1.02±0.051 T=0.152±0.051	GB50 L=1.27±0.254 W=1.27±0.254 T=0.152±0.051	GB70 L=1.78±0.254 W=1.78±0.254 T=0.178±0.051	GB90 L=2.29±0.254 W=2.29±0.254 T=0.178±0.051
Dielectric Code	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**	**Cap Value (pF)**
A	—	0.10–1.00	0.16–1.50	0.30–2.40	0.40–3.50	0.50–4.60	0.70–5.70	1.00–10.00	—	—
4	—	1.30–2.20	2.40–4.00	3.80–6.20	5.50–9.00	8.00–12.00	9.00–14.00	15.00–25.00	—	—
7	—	2.40–4.00	4.30–7.00	7.00–11.00	10.00–16.00	14.00–20.00	16.00–25.00	30.00–45.00	—	—
Y	—	4.30–7.00	7.50–12.50	12.00–20.00	17.00–28.00	25.00–37.00	30.00–45.00	50.00–80.00	—	—
C	—	8.0–54.0	14.0–97.0	22.0–150.0	31.0–220.0	45.0–300.0	50.00–330.0	90.0–600.0	—	—
Z	6.00–70.0	9.00–120	20.0–250	33.0–380	—	80.0–870	—	120–2000	250–3200	450–5100

	GB01 L=0.381±0.127 W=0.381±0.127 T=0.178±0.051	GB02 L=0.635±0.127 W=0.635±0.127 T=0.178±0.051	GB03 L=0.889±0.127 W=0.889±0.127 T=0.178±0.051	GB04 L=1.27±0.254 W=1.27±0.254 T=0.178±0.051	GB05 L=1.78±0.254 W=1.78±0.254 T=0.178±0.051	GB06 L=2.29±0.254 W=2.29±0.254 T=0.178±0.051
Dielectric Code	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**	**Cap (pF)**
8	51.0–220	220–560	560–1000	1000–2200	2200–4700	4700–8200
9	220–330	330–820	820–1500	1500–2700	2700–6800	6800–10000

S21 Forward Transmission Shunt Mode



Dimension

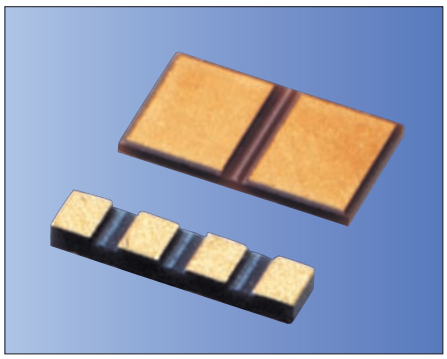


Packaging

Waffle Pack

Type	Packaging (pcs.)
GH/ GB10	484
GH/ GB15	400
GH/ GB20	400
GH/ GB25	400
GH/ GB35	400
GH/ GB50	256
GH/ GB70	256
GH/ GB90	100

Microwave Capacitors (GHB/ GHC to F Series)



Pb Free RoHS Compliant

How to Order

GH B 5 5 A 6R8 K A 6N
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series
② Number of Array

B	2	C	3	D	4
E	5	F	6		

③ Width Code (unit: mm)

2	0.508	Y	0.635
3	0.762	4	1.016
5	1.270	S	Custom

④ Working Voltage Code

5	50WVDC

⑤ Temperature Coefficient

A	NPO	8	X7R (maxi)
C	X7R	9	X7R (maxi+)
Z	X7S		

⑥ Capacitance
⑦ Capacitance Tolerance Code

M*	±20%	P	+100 to 0%
Z	+80 to –20%		

*option

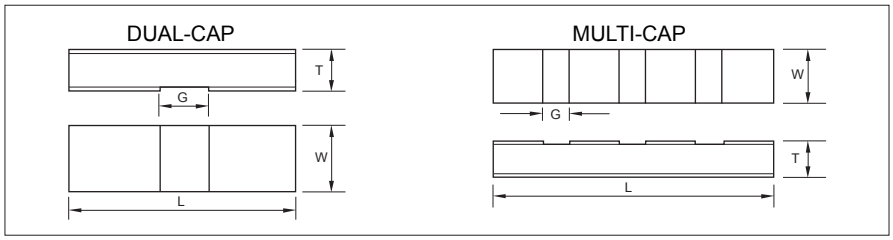
⑧ Termination Code

A	Ti/ W+Au	N	Ti/ W+Ni+Au

⑨ Packaging Code

6N	Antistatic Waffle Pack

Dimensions



Specifications

GHB series (unit: pF)

Type	Size	Dielectric Code	A	C	Z	8	9
GHB2	L =1.27±0.254 W=0.432 to 0.508 T =0.203±0.051 G=0.127±0.254	Cap (pF)	0.2 to 1.2	18 to 75	25 to 220	200 to 350	270 to 450
GHBY	L =2.032±0.381 W=0.559 to 0.635 T =0.203±0.051 G=0.127±0.254	Cap (pF)	0.4 to 2.6	39 to 160	54 to 500	430 to 780	600 to 1000
GHB3	L =2.032±0.381 W=0.686 to 0.762 T =0.203±0.051 G=0.127±0.254	Cap (pF)	0.5 to 3.1	47 to 200	65 to 600	520 to 940	730 to 1200
GHB4	L =2.032±0.381 W=0.944 to 1.02 T =0.203±0.051 G=0.127±0.254	Cap (pF)	0.7 to 4.2	63 to 260	88 to 770	700 to 1200	980 to 1500
GHB5	L =2.032±0.381 W=1.194 to 1.270 T =0.203±0.051 G=0.127±0.254	Cap (pF)	0.9 to 5.7	78 to 330	100 to 960	870 to 1500	1200 to 1900

GHC/ GHD/ GHE/ GHF series (unit: pF)

Type	Size		Dielectric Code	Z	8	9
GH–2	3: L=1.65±0.254 4: L=2.29±0.254 5: L=2.92±0.254 6: L=3.56±0.254 Pad=0.508×0.381	W=0.508±0.127 T=0.203±0.051 G=0.127 to 0.254	Cap (pF)	20 to 120	140 to 200	200 to 300
GH–Y	3: L=1.65±0.254 4: L=2.29±0.254 5: L=2.92±0.254 6: L=3.56±0.254 Pad=0.635×0.381	W=0.635±0.127 T=0.203±0.051 G=0.127 to 0.254	Cap (pF)	25 to 150	170 to 250	250 to 370
GH–3	3: L=1.65±0.254 4: L=2.29±0.254 5: L=2.92±0.254 6: L=3.56±0.254 Pad=0.762×0.381	W=0.762±0.127 T=0.203±0.051 G=0.127 to 0.254	Cap (pF)	30 to 180	210 to 300	300 to 450
GH–6	3: L=1.65±0.254 4: L=2.29±0.254 5: L=2.92±0.254 6: L=3.56±0.254 Pad=1.02×0.381	W=1.02±0.127 T=0.203±0.051 G=0.127 to 0.254	Cap (pF)	40 to 250	280 to 400	400 to 600