

SMD Chip Beads

SB/NB/HF/GB/PB/UPB

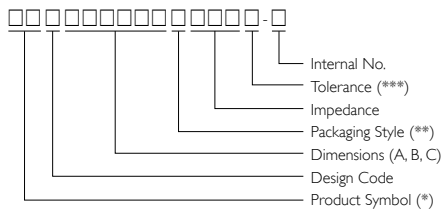


OUTLINE

Yageo offers hundreds of multi-layered ferrite chip beads with various sizes, frequency characteristics, and a wide range of impedance values to provide powerful solutions for EMI problems.

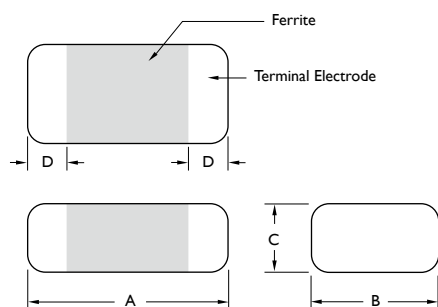
Three formulas of ferrite compose several types of EMI suppression chip beads that are classified into six categories- SB, NB, HF, GB, PB and UPB series.

PRODUCT IDENTIFICATION



- Product Symbol: SB, NB, HF, GB, PB, UPB
- Packaging: T = Tape and Reel, B = Bulk
- Tolerance: M = ±20%, Y = ±25%, T = ±30%
- Internal No.: N = Lead-Free

SHAPES AND DIMENSIONS



Unit: mm

TYPE		A	B	C	D
SB/NB/PB/HF	100505	1.0 ± 0.10	0.50 ± 0.10	0.5 ± 0.10	0.25 ± 0.10
SB/NB/GB/PB/UPB/HF	160808	1.6 ± 0.15	0.80 ± 0.15	0.8 ± 0.15	0.3 ± 0.2
SB/NB/GB/PB/UPB	201209	2.0 ± 0.20	1.25 ± 0.20	0.9 ± 0.20	0.5 ± 0.3
UPB	201212	2.0 ± 0.20	1.25 ± 0.20	1.25 ± 0.20	0.5 ± 0.3
SB/NB/GB/PB/UPB	321611	3.2 ± 0.20	1.60 ± 0.20	1.1 ± 0.20	0.5 ± 0.3
SB/GB	321616	3.2 ± 0.20	1.60 ± 0.20	1.6 ± 0.20	0.5 ± 0.3
SB/GB/PB	322513	3.2 ± 0.20	2.50 ± 0.20	1.3 ± 0.20	0.5 ± 0.3
SB/GB/PB/UPB	451616	4.5 ± 0.25	1.60 ± 0.20	1.6 ± 0.20	0.5 ± 0.3
SB/GB/PB/UPB	453215	4.5 ± 0.25	3.20 ± 0.20	1.5 ± 0.20	0.5 ± 0.3

ELECTRICAL CHARACTERISTICS SB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SBY100505T-060Y-N	6	100	0.05	500
SBY100505T-100Y-N	10	100	0.05	500
SBY100505T-400Y-N	40	100	0.20	500
SBY100505T-800Y-N	80	100	0.20	500
SBY100505T-121Y-N	120	100	0.25	500
SBY100505T-241Y-N	240	100	0.40	400
SBY100505T-481Y-N	480	100	0.50	300
SBY100505T-601Y-N	600	100	0.60	300
SBY100505T-102Y-N	1,000	100	0.95	200
SBY100505T-152Y-N	1,500	100	1.15	100
SBY100505T-182Y-N	1,800	100	1.40	100
SBK160808T-110Y-N	11	100	0.05	500
SBK160808T-190Y-N	19	100	0.08	500
SBK160808T-300Y-N	30	100	0.10	400
SBK160808T-400Y-N	40	100	0.10	400
SBK160808T-600Y-N	60	100	0.10	400
SBK160808T-800Y-N	80	100	0.15	400
SBK160808T-121Y-N	120	100	0.25	400
SBK160808T-221Y-N	220	100	0.30	300
SBK160808T-301Y-N	300	100	0.40	300
SBK160808T-451Y-N	450	100	0.50	300
SBK160808T-601Y-N	600	100	0.50	300
SBK160808T-751Y-N	750	100	0.60	300
SBK160808T-102Y-N	1,000	100	0.60	300
SBK160808T-152Y-N	1,500	100	0.60	300
SBK160808T-222Y-N	2,200	100	0.80	200
SBK160808T-272Y-N	2,700	100	0.80	200



ELECTRICAL CHARACTERISTICS SB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SBY201209T-070Y-N	7	100	0.10	600
SBY201209T-090Y-N	9	100	0.10	600
SBY201209T-110Y-N	11	100	0.10	600
SBY201209T-170Y-N	17	100	0.10	600
SBY201209T-320Y-N	32	100	0.10	600
SBK201209T-600Y-N	60	100	0.15	500
SBK201209T-700Y-N	70	100	0.15	500
SBK201209T-800Y-N	80	100	0.15	500
SBK201209T-121Y-N	120	100	0.25	300
SBK201209T-151Y-N	150	100	0.25	300
SBK201209T-221Y-N	220	100	0.30	300
SBK201209T-301Y-N	300	100	0.30	300
SBK201209T-401Y-N	400	100	0.30	300
SBK201209T-501Y-N	500	100	0.40	300
SBK201209T-601Y-N	600	100	0.40	300
SBK201209T-751Y-N	750	100	0.50	200
SBK201209T-102Y-N	1,000	100	0.50	200
SBK201209T-152Y-N	1,500	100	0.60	200
SBK201209T-202Y-N	2,000	100	0.70	200
SBK201209T-222Y-N	2,200	100	0.70	200
SBK201209T-252Y-N	2,500	100	0.70	200
SBK201209T-272Y-N	2,700	100	0.70	200
SBY321611T-190Y-N	19	100	0.05	600
SBY321611T-260Y-N	26	100	0.05	600
SBY321611T-320Y-N	32	100	0.05	600
SBY321611T-500Y-N	50	100	0.10	500
SBY321611T-600Y-N	60	100	0.10	500
SBK321611T-700Y-N	70	100	0.10	500
SBK321611T-900Y-N	90	100	0.15	500
SBK321611T-121Y-N	120	100	0.15	500
SBK321611T-151Y-N	150	100	0.15	500
SBK321611T-201Y-N	200	100	0.20	400
SBK321611T-401Y-N	400	100	0.20	400
SBK321611T-501Y-N	500	100	0.20	400
SBK321611T-601Y-N	600	100	0.30	400
SBK321611T-102Y-N	1,000	50	0.40	200
SBK321611T-122Y-N	1,200	50	0.40	200
SBK321611T-152Y-N	1,500	50	0.45	200
SBK321611T-202Y-N	2,000	30	0.60	200
SBK321611T-272Y-N	2,700	30	0.60	200

ELECTRICAL CHARACTERISTICS SB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
SBY321616T-250Y-N	25	100	0.10	500
SBY321616T-600Y-N	60	100	0.20	500
SBK321616T-700Y-N	70	100	0.20	500
SBY322513T-320Y-N	32	100	0.20	500
SBY322513T-600Y-N	60	100	0.20	500
SBY322513T-900Y-N	90	100	0.20	500
SBY451616T-500Y-N	50	100	0.20	600
SBY451616T-600Y-N	60	100	0.20	600
SBY451616T-800Y-N	80	100	0.20	600
SBY451616T-101Y-N	100	100	0.30	500
SBK451616T-151Y-N	150	100	0.30	500
SBK451616T-171Y-N	170	100	0.30	500
SBY453215T-700Y-N	70	100	0.30	500
SBY453215T-121Y-N	120	100	0.30	500



ELECTRICAL CHARACTERISTICS NB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
NBQ100505T-060Y-N	6	100	0.08	500
NBQ100505T-100Y-N	10	100	0.10	500
NBQ100505T-400Y-N	40	100	0.25	400
NBQ100505T-800Y-N	80	100	0.30	400
NBQ100505T-121Y-N	120	100	0.40	350
NBQ100505T-221Y-N	220	100	0.60	200
NBQ100505T-301Y-N	300	100	1.00	200
NBQ100505T-481Y-N	480	100	1.10	200
NBQ100505T-601Y-N	600	100	1.20	200
NBQ160808T-060Y-N	6	100	0.05	700
NBQ160808T-100Y-N	10	100	0.07	500
NBQ160808T-400Y-N	40	100	0.20	500
NBQ160808T-600Y-N	60	100	0.25	500
NBQ160808T-800Y-N	80	100	0.25	500
NBQ160808T-121Y-N	120	100	0.30	400
NBQ160808T-241Y-N	240	100	0.35	400
NBQ160808T-301Y-N	300	100	0.40	400
NBQ160808T-481Y-N	480	100	0.50	200
NBQ160808T-601Y-N	600	100	0.50	200
NBQ160808T-102Y-N	1,000	100	0.60	200
NBQ160808T-122Y-N	1,200	100	0.60	100
NBQ160808T-152Y-N	1,500	100	0.70	100
NBQ160808T-182Y-N	1,800	100	0.80	100
NBQ160808T-222Y-N	2,200	100	1.00	100
NBQ160808T-252Y-N	2,500	100	1.00	100

ELECTRICAL CHARACTERISTICS NB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
NBQ201209T-060Y-N	6	100	0.07	800
NBQ201209T-110Y-N	11	100	0.10	700
NBQ201209T-260Y-N	26	100	0.15	600
NBQ201209T-320Y-N	32	100	0.15	600
NBQ201209T-600Y-N	60	100	0.15	500
NBQ201209T-750Y-N	75	100	0.15	500
NBQ201209T-900Y-N	90	100	0.15	500
NBQ201209T-121Y-N	120	100	0.20	500
NBQ201209T-151Y-N	150	100	0.20	500
NBQ201209T-171Y-N	170	100	0.30	500
NBQ201209T-221Y-N	220	100	0.30	500
NBQ201209T-301Y-N	300	100	0.30	500
NBQ201209T-401Y-N	400	100	0.35	500
NBQ201209T-501Y-N	500	100	0.35	500
NBQ201209T-601Y-N	600	100	0.35	500
NBQ201209T-102Y-N	1,000	100	0.40	400
NBQ201209T-122Y-N	1,200	100	0.45	400
NBQ201209T-152Y-N	1,500	100	0.45	400
NBQ201209T-222Y-N	2,200	100	0.50	400
NBQ201209T-272Y-N	2,700	100	0.60	200
NBQ321611T-320Y-N	32	100	0.15	600
NBQ321611T-600Y-N	60	100	0.15	500
NBQ321611T-800Y-N	80	100	0.15	500
NBQ321611T-900Y-N	90	100	0.15	500
NBQ321611T-121Y-N	120	100	0.20	500
NBQ321611T-151Y-N	150	100	0.20	500
NBQ321611T-201Y-N	200	100	0.25	400
NBQ321611T-221Y-N	220	100	0.30	400
NBQ321611T-351Y-N	350	100	0.30	400
NBQ321611T-401Y-N	400	100	0.30	400
NBQ321611T-601Y-N	600	100	0.35	400
NBQ321611T-122Y-N	1,200	100	0.40	300
NBQ321611T-152Y-N	1,500	100	0.45	300



ELECTRICAL CHARACTERISTICS NB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
NBP160808T-220Y-N	22	100	0.07	1,800
NBP160808T-300Y-N	30	100	0.07	1,800
NBP160808T-600Y-N	60	100	0.10	1,500
NBP160808T-800Y-N	80	100	0.12	1,200
NBP160808T-121Y-N	120	100	0.15	1,000
NBP201209T-070Y-N	7	100	0.03	2,000
NBP201209T-320Y-N	32	100	0.05	1,800
NBP201209T-400Y-N	40	100	0.08	1,500
NBP201209T-600Y-N	60	100	0.08	1,500
NBP201209T-121Y-N	120	100	0.10	1,000
NBP201209T-221Y-N	220	100	0.15	800
NBP321611T-150Y-N	15	100	0.04	2,000
NBP321611T-190Y-N	19	100	0.04	2,000
NBP321611T-300Y-N	30	100	0.06	1,800
NBP321611T-600Y-N	60	100	0.08	1,500
NBP321611T-121Y-N	120	100	0.10	1,200
NBP321611T-221Y-N	220	100	0.12	1,200
NBP321611T-601Y-N	600	100	0.15	1,000

ELECTRICAL CHARACTERISTICS HF Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	IMPEDANCE (Ω) Max.	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
HFJ100505T-601Y-N	600	100	1,400	1,000	0.850	300
HFJ100505T-102Y-N	1,000	100	2,000	1,000	1.250	250
HFJ100505T-152Y-N	1,500	100	2,400	1,000	1.800	230
HFJ100505T-182Y-N	1,800	100	2,700	1,000	2.200	200
HFJ160808T-471Y-N	470	100	1,000	1,000	1.000	100
HFJ160808T-601Y-N	600	100	1,200	1,000	1.100	100
HFJ160808T-102Y-N	1,000	100	1,200	1,000	1.600	50
HFJ160808T-152Y-N	1,500	100	1,500	1,000	1.700	50
HFQ100505T-121Y-N	120	100	500	1,000	0.700	300
HFQ100505T-221Y-N	220	100	900	1,000	1.000	250
HFQ160808T-121Y-N	120	100	500	1,000	0.500	200
HFQ160808T-221Y-N	220	100	1,100	1,000	0.800	100
HFQ160808T-301Y-N	300	100	1,300	1,000	1.100	80
HFQ160808T-331Y-N	330	100	1,600	1,000	1.200	50
HFV160808T-601Y-N	600	100	600	1,000	0.250	800
HFV160808T-102Y-N	1,000	100	1,000	1,000	0.350	600
HFV160808T-152Y-N	1,500	100	1,500	1,000	0.500	500
HFY100505T-601Y-N	600	100	1,000	1,000	0.700	300
HFY100505T-102Y-N	1,000	100	1,400	1,000	1.100	250
HFY100505T-121Y-NP	120	100	150	1,000	0.095	1,500
HFY100505T-221Y-NP	220	100	270	1,000	0.280	700
HFY160808T-301Y-N	300	100	550	1,000	0.700	200
HFY160808T-471Y-N	470	100	600	1,000	0.700	200
HFY160808T-601Y-N	600	100	700	1,000	0.800	200
HFY160808T-102Y-N	1,000	100	1,000	1,000	1.500	100
HFY160808T-152Y-N	1,500	100	1,500	1,000	1.600	100
HFY160808T-331Y-NP	330	100	450	1,000	0.210	500
HFY160808T-391Y-NP	390	100	520	1,000	0.210	500
HFY160808T-471Y-NP	470	100	600	1,000	0.210	500
HFY160808T-601Y-NP	600	100	700	1,000	0.350	500
HFY160808T-102Y-NP	1,000	100	1,000	1,000	0.500	450



ELECTRICAL CHARACTERISTICS GB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
GBK160808T-110Y-N	11	100	0.03	1,000
GBK160808T-190Y-N	19	100	0.05	1,000
GBK160808T-300Y-N	30	100	0.06	800
GBK160808T-400Y-N	40	100	0.06	800
GBK160808T-600Y-N	60	100	0.06	600
GBK160808T-800Y-N	80	100	0.10	600
GBK160808T-121Y-N	120	100	0.15	600
GBK160808T-221Y-N	220	100	0.18	400
GBK160808T-301Y-N	300	100	0.25	400
GBK160808T-451Y-N	450	100	0.30	400
GBK160808T-601Y-N	600	100	0.30	400
GBK160808T-751Y-N	750	100	0.45	300
GBK160808T-102Y-N	1,000	100	0.45	300
GBY201209T-070Y-N	7	100	0.06	1,000
GBY201209T-090Y-N	9	100	0.06	1,000
GBY201209T-110Y-N	11	100	0.06	1,000
GBY201209T-170Y-N	17	100	0.06	1,000
GBY201209T-320Y-N	32	100	0.06	1,000
GBK201209T-600Y-N	60	100	0.10	800
GBK201209T-700Y-N	70	100	0.10	800
GBK201209T-800Y-N	80	100	0.10	800
GBK201209T-121Y-N	120	100	0.15	600
GBK201209T-151Y-N	150	100	0.15	600
GBK201209T-221Y-N	220	100	0.18	600
GBK201209T-301Y-N	300	100	0.18	600
GBK201209T-401Y-N	400	100	0.18	600
GBK201209T-501Y-N	500	100	0.25	500
GBK201209T-601Y-N	600	100	0.25	500
GBK201209T-751Y-N	750	100	0.30	400
GBK201209T-102Y-N	1,000	100	0.30	400
GBK201209T-152Y-N	1,500	100	0.40	400
GBK201209T-202Y-N	2,000	100	0.55	400

ELECTRICAL CHARACTERISTICS GB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
GBY321611T-190Y-N	19	100	0.03	1,000
GBY321611T-260Y-N	26	100	0.03	1,000
GBY321611T-320Y-N	32	100	0.03	1,000
GBY321611T-500Y-N	50	100	0.06	800
GBY321611T-600Y-N	60	100	0.06	800
GBK321611T-700Y-N	70	100	0.06	800
GBK321611T-900Y-N	90	100	0.10	800
GBK321611T-121Y-N	120	100	0.10	800
GBK321611T-151Y-N	150	100	0.10	800
GBK321611T-201Y-N	200	100	0.15	600
GBK321611T-401Y-N	400	100	0.15	600
GBK321611T-501Y-N	500	100	0.15	600
GBK321611T-601Y-N	600	100	0.20	500
GBK321611T-102Y-N	1,000	50	0.25	400
GBK321611T-122Y-N	1,200	50	0.25	400
GBK321611T-202Y-N	2,000	30	0.35	400
GBY321616T-250Y-N	25	100	0.10	1,000
GBY321616T-600Y-N	60	100	0.10	1,000
GBK321616T-700Y-N	70	100	0.10	1,000
GBY322513T-320Y-N	32	100	0.10	1,000
GBY322513T-600Y-N	60	100	0.10	1,000
GBY322513T-900Y-N	90	100	0.10	1,000
GBY451616T-500Y-N	50	100	0.10	1,000
GBY451616T-600Y-N	60	100	0.10	1,000
GBY451616T-800Y-N	80	100	0.10	1,000
GBY451616T-101Y-N	100	100	0.18	800
GBK451616T-151Y-N	150	100	0.18	800
GBK451616T-171Y-N	170	100	0.18	800
GBY453215T-700Y-N	70	100	0.18	800
GBY453215T-121Y-N	120	100	0.18	800



ELECTRICAL CHARACTERISTICS PB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
PBY100505T-100Y-N	10	100	0.030	2,000
PBY100505T-300Y-N	30	100	0.050	1,700
PBY100505T-400Y-N	40	100	0.075	1,500
PBY100505T-600Y-N	60	100	0.075	1,500
PBY100505T-700Y-N	70	100	0.090	1,200
PBY100505T-800Y-N	80	100	0.090	1,200
PBY100505T-121Y-N	120	100	0.090	1,200
PBY160808T-110Y-N	11	100	0.020	4,000
PBY160808T-250Y-N	25	100	0.030	3,000
PBY160808T-400Y-N	40	100	0.035	3,000
PBY160808T-600Y-N	60	100	0.040	3,000
PBY160808T-121Y-N	120	100	0.080	2,500
PBY160808T-151Y-N	150	100	0.085	2,000
PBY160808T-181Y-N	180	100	0.090	2,000
PBY160808T-201Y-N	200	100	0.095	2,000
PBY160808T-301Y-N	300	100	0.120	1,500
PBY160808T-501Y-N	500	100	0.150	1,200
PBY160808T-601Y-N	600	100	0.200	1,000
PBY160808T-102Y-N	1,000	100	0.250	800
PBY201209T-110Y-N	11	100	0.010	6,000
PBY201209T-170Y-N	17	100	0.020	5,000
PBY201209T-300Y-N	30	100	0.015	4,000
PBY201209T-500Y-N	50	100	0.025	3,000
PBY201209T-600Y-N	60	100	0.030	3,000
PBY201209T-800Y-N	80	100	0.040	3,000
PBY201209T-121Y-N	120	100	0.040	3,000
PBY201209T-201Y-N	200	100	0.050	2,500
PBY201209T-301Y-N	300	100	0.080	2,000
PBY201209T-601Y-N	600	100	0.100	2,000
PBY201209T-102Y-N	1,000	100	0.120	1,500

ELECTRICAL CHARACTERISTICS PB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
PBY321611T-190Y-N	19	100	0.015	6,000
PBY321611T-320Y-N	32	100	0.015	4,000
PBY321611T-500Y-N	50	100	0.020	4,000
PBY321611T-800Y-N	80	100	0.025	3,000
PBY321611T-101Y-N	100	100	0.030	3,000
PBY321611T-121Y-N	120	100	0.030	3,000
PBY321611T-221Y-N	220	100	0.050	2,000
PBY321611T-301Y-N	300	100	0.060	2,000
PBY321611T-601Y-N	600	100	0.100	2,000
PBY321611T-102Y-N	1,000	50	0.150	1,200
PBY321611T-122Y-N	1,200	50	0.180	1,000
PBY321611T-152Y-N	1,500	50	0.200	800
PBY322513T-600Y-N	60	100	0.025	4,000
PBY322513T-900Y-N	90	100	0.025	3,000
PBY451616T-500Y-N	50	100	0.020	6,000
PBY451616T-600Y-N	60	100	0.020	5,000
PBY451616T-800Y-N	80	100	0.025	4,000
PBY451616T-900Y-N	90	100	0.040	4,000
PBY451616T-151Y-N	150	100	0.100	2,000
PBY451616T-471Y-N	470	100	0.100	2,000
PBY451616T-102Y-N	1,000	100	0.100	2,000
PBY453215T-700Y-N	70	100	0.030	6,000
PBY453215T-121Y-N	120	100	0.030	4,000
PBY453215T-151Y-N	150	100	0.028	4,000
PBY453215T-601Y-N	600	100	0.028	4,000
PBY453215T-132Y-N	1,300	100	0.150	1,500

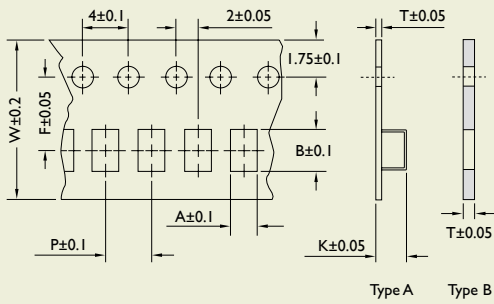


ELECTRICAL CHARACTERISTICS UPB Series

PART NO.	IMPEDANCE (Ω) $\pm 25\%$	TEST FREQUENCY (MHz)	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
UPB160808T-110Y-N	11	100	0.015	4,500
UPB160808T-170Y-N	17	100	0.015	4,500
UPB160808T-250Y-N	25	100	0.015	4,500
UPB160808T-300Y-N	30	100	0.015	4,500
UPB201209T-110Y-N	11	100	0.015	6,000
UPB201209T-150Y-N	15	100	0.015	6,000
UPB201209T-190Y-N	19	100	0.015	6,000
UPB201209T-260Y-N	26	100	0.015	6,000
UPB201209T-300Y-N	30	100	0.015	6,000
UPB201209T-330Y-N	33	100	0.015	6,000
UPB201209T-400Y-N	40	100	0.015	6,000
UPB201209T-500Y-N	50	100	0.015	6,000
UPB201209T-600Y-N	60	100	0.020	4,500
UPB201209T-800Y-N	80	100	0.020	4,500
UPB201209T-101Y-N	100	100	0.020	5,000
UPB201209T-121Y-N	120	100	0.020	5,000
UPB201212T-600Y-N	60	100	0.020	6,000
UPB201212T-700Y-N	70	100	0.020	6,000
UPB201212T-800Y-N	80	100	0.020	6,000
UPB201212T-101Y-N	100	100	0.025	5,000
UPB201212T-121Y-N	120	100	0.025	5,000
UPB321611T-110Y-N	11	100	0.012	6,000
UPB321611T-190Y-N	19	100	0.012	6,000
UPB321611T-260Y-N	26	100	0.012	6,000
UPB321611T-300Y-N	30	100	0.012	6,000
UPB321611T-400Y-N	40	100	0.012	6,000
UPB321611T-500Y-N	50	100	0.012	6,000
UPB321611T-600Y-N	60	100	0.012	6,000
UPB321611T-800Y-N	80	100	0.012	6,000
UPB321611T-101Y-N	100	100	0.012	6,000
UPB321611T-121Y-N	120	100	0.012	6,000
UPB321611T-151Y-N	150	100	0.020	4,500
UPB451616T-600Y-N	100	60	0.012	7,000
UPB453215T-700Y-N	100	70	0.010	9,000

TAPE DIMENSIONS

Unit: mm

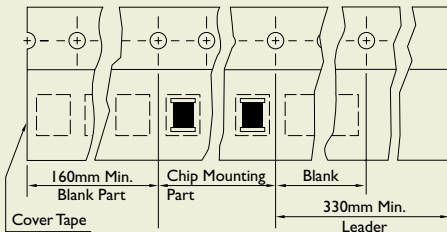


TYPE		A	B	T	W	P	F	K	TAPE TYPE
SB/NB/PB/HF	100505	0.65	1.15	0.60	8.0	2.0	3.5	-	B
SB/NB/GB/PB/UPB/HF	160808	1.05	1.85	0.95	8.0	4.0	3.5	-	B
SB/NB/GB/PB/UPB	201209	1.50	2.30	0.97	8.0	4.0	3.5	-	B
UPB	201212	1.35	2.25	0.22	8.0	4.0	3.5	1.35	A
SB/NB/GB/PB/UPB	321611	1.88	3.50	0.22	8.0	4.0	3.5	1.27	A
SB/GB	321616	1.88	3.53	0.22	8.0	4.0	3.5	1.80	A
SB/GB/PB	322513	2.77	3.42	0.22	8.0	4.0	3.5	1.55	A
SB/GB/PB/UPB	451616	1.93	4.95	0.24	12.0	4.0	5.5	1.93	A
SB/GB/PB/UPB	453215	3.66	4.95	0.24	12.0	8.0	5.5	1.85	A

TAPE MATERIAL

Carrier Tape : Polystyrene (Type A), Paper (Type B)

Cover Tape : Polyethylene

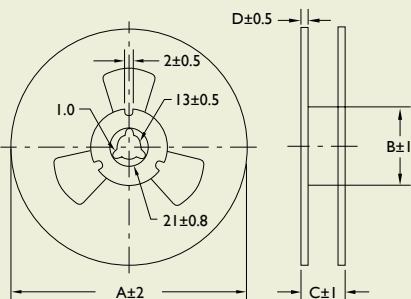


PACKAGING QUANTITY

TYPE		QUANTITY/REEL
SB/NB/PB/HF	100505	10,000
SB/NB/GB/PB/UPB/HF	160808	4,000
SB/NB/GB/PB/UPB	201209	4,000
UPB	201212	3,000
SB/NB/GB/PB/UPB	321611	3,000
SB/GB	321616	2,000
SB/GB/PB	322513	2,500
SB/GB/PB/UPB	451616	2,000
SB/GB/PB/UPB	453215	1,000

REEL DIMENSIONS

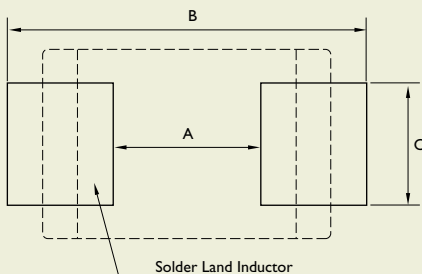
Unit: mm



TYPE		A	B	C	D
SB/NB/PB/HF	100505	178	60	12	2
SB/NB/GB/PB/UPB/HF	160808	178	60	12	2
SB/NB/GB/PB/UPB	201209	178	60	12	2
UPB	201212	178	60	12	2
SB/NB/GB/PB/UPB	321611	178	60	12	2
SB/GB	321616	178	60	12	2
SB/GB/PB	322513	178	60	12	2
SB/GB/PB/UPB	451616	178	60	14	2
SB/GB/PB/UPB	453215	178	60	14	2

RECOMMENDED PATTERN

Unit: mm



TYPE		A	B	C
SB/NB/PB/HF	100505	0.4	1.2 ~ 1.4	0.5
SB/NB/GB/PB/UPB/HF	160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
SB/NB/GB/PB/UPB	201209	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
UPB	201212	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
SB/NB/GB/PB/UPB	321611	2	4.2 ~ 5.2	1.2
SB/GB	321616	2	4.2 ~ 5.2	1.2
SB/GB/PB	322513	2	5.5 ~ 6.5	1.8
SB/GB/PB/UPB	451616	3	5.5 ~ 6.5	1.2
SB/GB/PB/UPB	453215	3	5.5 ~ 6.5	2.4