

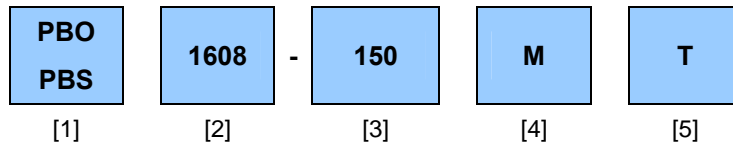
**FEATURES**

**PBO & PBS Series**

- High saturation current
- Ceramic base with gold-plating
- Suitable for reflow soldering
- PBS Type with magnetical shielded
- Applied to DC/DC Converter , Portable Communication Equipment and Notebook Computer , Power Supply for VTRS



**ORDERING CODE**

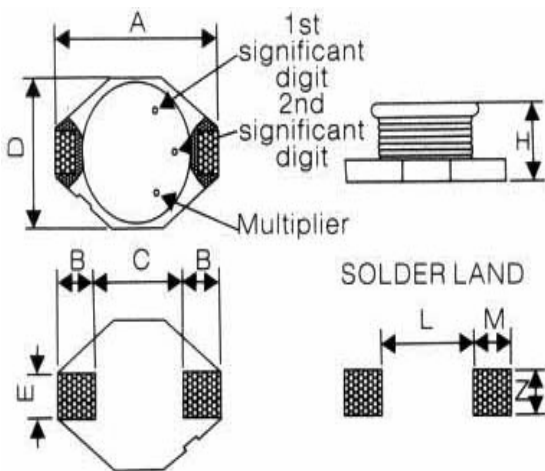


- [1] **Product Type:** PBO & PBS
- [2] **Size Code:** 1608 , 3308 , 3316 , 5022
- [3] **Inductance:** Example: 1R5 = 1.5uH ; 150 = 15uH ; 151 = 150uH
- [4] **Tolerance:** J±5% ; K±10% ; L±15% ; M±20%
- [5] **Packing:** T-Tape & Reel

**DIMENSIONS**

Unit: mm

**PBO Series**



Size	1608	3308	3316	5022
A	6.60	12.95	12.95	18.54
B	1.02	2.54	2.54	2.54
C	4.32	7.62	7.62	12.70
D	4.45	9.40	9.40	15.24
E	1.27	2.54	2.54	2.54
H	2.92	3.00	5.21	7.11
L	4.06	7.37	7.37	12.45
M	3.56	2.92	2.92	2.92
N	1.40	2.79	2.79	2.79

**ELECTRICAL CHARACTERISTICS**
**PBO Series Type 1608**

Part Number	L( $\mu$ H)	Tolerance	Test Freq.	DCR( $\Omega$ )Max.	SRF(MHz)	Isat(A)	Irms(A)
PBO1608-1R0MT	1.0	$\pm 20\%$	100KHz	0.05	130	2.90	2.90
PBO1608-1R5MT	1.5	$\pm 20\%$	100KHz	0.05	115	2.60	2.80
PBO1608-2R2MT	2.2	$\pm 20\%$	100KHz	0.07	90	2.30	2.40
PBO1608-3R3MT	3.3	$\pm 20\%$	100KHz	0.08	70	2.00	2.00
PBO1608-4R7MT	4.7	$\pm 20\%$	100KHz	0.09	50	1.50	1.50
PBO1608-6R8MT	6.8	$\pm 20\%$	100KHz	0.13	45	1.20	1.14
PBO1608-100MT	10	$\pm 20\%$	100KHz	0.16	35	1.10	1.10
PBO1608-150MT	15	$\pm 20\%$	100KHz	0.23	30	0.90	1.20
PBO1608-220MT	22	$\pm 20\%$	100KHz	0.37	20	0.70	0.80
PBO1608-330MT	33	$\pm 20\%$	100KHz	0.51	15	0.58	0.60
PBO1608-470MT	47	$\pm 20\%$	100KHz	0.64	14	0.50	0.50
PBO1608-680MT	68	$\pm 20\%$	100KHz	0.86	11	0.40	0.40
PBO1608-101MT	100	$\pm 20\%$	100KHz	1.27	9	0.31	0.30
PBO1608-151MT	150	$\pm 20\%$	100KHz	2.00	6	0.27	0.25
PBO1608-221MT	220	$\pm 20\%$	100KHz	3.11	5.5	0.22	0.20
PBO1608-331MT	330	$\pm 20\%$	100KHz	3.80	5	0.18	0.16
PBO1608-471MT	470	$\pm 20\%$	100KHz	5.06	4	0.16	0.15
PBO1608-681MT	680	$\pm 20\%$	100KHz	9.20	3	0.14	0.12
PBO1608-102MT	1000	$\pm 20\%$	100KHz	13.8	2	0.10	0.07

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

 Irms:  $\Delta T=15^{\circ}\text{C}$  rise typ. at Irms

**PBO Series Type 3308**

Part Number	L( $\mu$ H)	Tolerance	Test Freq.	DCR( $\Omega$ )Max.	SRF(MHz)	Isat(A)	Irms(A)
PBO3308-100MT	10	$\pm 20\%$	100KHz	0.11	35	2.40	2.00
PBO3308-150MT	15	$\pm 20\%$	100KHz	0.15	33	2.00	1.50
PBO3308-220MT	22	$\pm 20\%$	100KHz	0.23	25	1.60	1.30
PBO3308-330MT	33	$\pm 20\%$	100KHz	0.30	19	1.40	1.10
PBO3308-470MT	47	$\pm 20\%$	100KHz	0.39	14	1.00	0.80
PBO3308-680MT	68	$\pm 20\%$	100KHz	0.66	12	0.90	0.70
PBO3308-101MT	100	$\pm 20\%$	100KHz	0.84	10	0.70	0.60
PBO3308-151MT	150	$\pm 20\%$	100KHz	1.20	8	0.60	0.50
PBO3308-221MT	220	$\pm 20\%$	100KHz	1.90	6	0.50	0.40
PBO3308-331MT	330	$\pm 20\%$	100KHz	2.70	5	0.40	0.30
PBO3308-471MT	470	$\pm 20\%$	100KHz	4.00	4	0.30	0.20
PBO3308-681MT	680	$\pm 20\%$	100KHz	5.30	3	0.20	0.10
PBO3308-102MT	1000	$\pm 20\%$	100KHz	8.40	2.5	0.10	0.05

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

 Irms:  $\Delta T=30^{\circ}\text{C}$  rise typ. at Irms.

**ELECTRICAL CHARACTERISTICS**
**PBO Series Type 3316**

Part Number	L(μH)	Tolerance	Test Freq.	DCR(Ω)Max.	SRF(MHz)	Isat(A)	Irms(A)
PBO3316-1R0MT	1.0	±20%	100KHz	0.009	100	9.0	6.8
PBO3316-1R5MT	1.5	±20%	100KHz	0.010	90	8.0	6.4
PBO3316-2R2MT	2.2	±20%	100KHz	0.012	80	7.0	6.1
PBO3316-3R3MT	3.3	±20%	100KHz	0.015	65	6.4	5.4
PBO3316-4R7MT	4.7	±20%	100KHz	0.018	45	5.4	4.8
PBO3316-6R8MT	6.8	±20%	100KHz	0.027	38	4.6	4.4
PBO3316-100MT	10	±20%	100KHz	0.038	30	3.8	3.9
PBO3316-150MT	15	±20%	100KHz	0.046	27	3.0	3.1
PBO3316-220MT	22	±20%	100KHz	0.085	19	2.6	2.7
PBO3316-330MT	33	±20%	100KHz	0.100	15	2.0	2.1
PBO3316-470MT	47	±20%	100KHz	0.140	12	1.6	1.8
PBO3316-680MT	68	±20%	100KHz	0.200	10	1.4	1.5
PBO3316-101MT	100	±20%	100KHz	0.280	9	1.2	1.3
PBO3316-151MT	150	±20%	100KHz	0.400	6	1.0	1.0
PBO3316-221MT	220	±20%	100KHz	0.610	5	0.8	0.8
PBO3316-331MT	330	±20%	100KHz	1.020	4.5	0.6	0.6
PBO3316-471MT	470	±20%	100KHz	1.270	3.5	0.5	0.5
PBO3316-681MT	680	±20%	100KHz	2.020	2.5	0.4	0.4
PBO3316-102MT	1000	±20%	100KHz	3.000	2.0	0.3	0.3

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

Irms: ΔT=15°C rise typ. at Irms

**PBO Series Type 5022**

Part Number	L(μH)	Tolerance	Test Freq.	DCR(Ω)Max.	SRF(MHz)	Isat(A)	Irms(A)
PBO5022-1R0MT	1.0	±20%	100KHz	0.009	80	20	8.6
PBO5022-2R2MT	2.2	±20%	100KHz	0.014	80	16	7.1
PBO5022-3R3MT	3.3	±20%	100KHz	0.018	60	14	6.2
PBO5022-6R8MT	5.6	±20%	100KHz	0.020	40	12	5.3
PBO5022-100MT	10	±20%	100KHz	0.031	30	10	4.3
PBO5022-150MT	15	±20%	100KHz	0.036	22	8.0	4.0
PBO5022-220MT	22	±20%	100KHz	0.047	20	7.0	3.5
PBO5022-330MT	33	±20%	100KHz	0.066	15	5.5	3.0
PBO5022-470MT	47	±20%	100KHz	0.086	9	4.5	2.6
PBO5022-680MT	68	±20%	100KHz	0.130	8	3.5	2.3
PBO5022-101MT	100	±20%	100KHz	0.190	7	3.0	1.8
PBO5022-151MT	150	±20%	100KHz	0.250	6	2.6	1.5
PBO5022-221MT	220	±20%	100KHz	0.380	5	2.4	1.2
PBO5022-331MT	330	±20%	100KHz	0.560	4	1.9	1.0
PBO5022-471MT	470	±20%	100KHz	0.850	3	1.4	0.8
PBO5022-681MT	680	±20%	100KHz	1.100	2.5	1.2	0.72
PBO5022-102MT	1000	±20%	100KHz	1.800	2	1.0	0.56

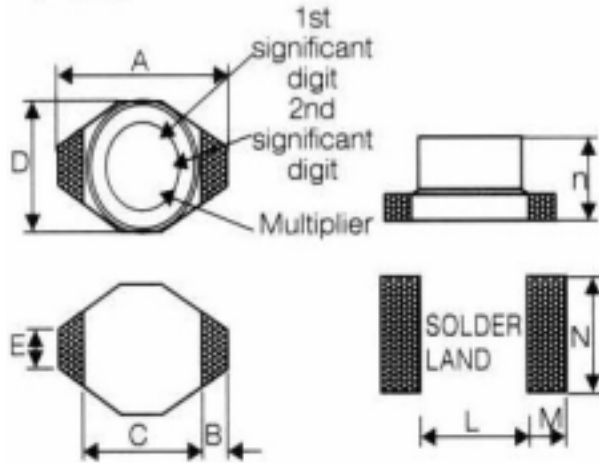
Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

Irms: ΔT=40°C rise typ. at Irms

**■ DIMENSIONS**

Unit: mm

**PBS Series**


Size	1608	3316	5022
A	6.60	12.95	18.54
B	1.02	2.54	2.54
C	4.32	7.62	12.70
D	4.45	9.40	15.24
E	1.27	2.54	2.54
H	2.92	5.21	7.11
L	4.06	7.37	12.45
M	3.56	2.92	2.92
N	1.40	2.79	2.79

**■ ELECTRICAL CHARACTERISTICS**
**PBS Series Type 1608**

Part Number	L(uH)	Tolerance	Test Freq.	DCR(Ω)Max.	SRF(MHz)	IDC(A)
PBS1608-1R0MT	1.0	±20%	100KHz	0.040	250	3.00
PBS1608-1R5MT	1.5	±20%	100KHz	0.045	125	2.80
PBS1608-2R2MT	2.2	±20%	100KHz	0.050	120	1.80
PBS1608-3R3MT	3.3	±20%	100KHz	0.055	120	1.60
PBS1608-4R7MT	4.7	±20%	100KHz	0.060	105	1.40
PBS1608-6R8MT	6.8	±20%	100KHz	0.065	50	1.20
PBS1608-100MT	10	±20%	100KHz	0.075	38	1.00
PBS1608-150MT	15	±20%	100KHz	0.090	33	0.80
PBS1608-220MT	22	±20%	100KHz	0.110	25	0.70
PBS1608-330MT	33	±20%	100KHz	0.190	20	0.60
PBS1608-470MT	47	±20%	100KHz	0.230	20	0.50
PBS1608-680MT	68	±20%	100KHz	0.290	15	0.40
PBS1608-101MT	100	±20%	100KHz	0.480	10	0.30
PBS1608-151MT	150	±20%	100KHz	0.590	9	0.26
PBS1608-221MT	220	±20%	100KHz	0.770	6	0.22
PBS1608-331MT	330	±20%	100KHz	1.400	5	0.20
PBS1608-471MT	470	±20%	100KHz	1.800	4	0.19
PBS1608-681MT	680	±20%	100KHz	2.200	3	0.18
PBS1608-102MT	1000	±20%	100KHz	3.400	2	0.15
PBS1608-152MT	1500	±20%	100KHz	4.200	2	0.12
PBS1608-222MT	2200	±20%	100KHz	8.500	2	0.10
PBS1608-332MT	3300	±20%	100KHz	11.00	1	0.08
PBS1608-472MT	4700	±20%	100KHz	13.90	1	0.06
PBS1608-682MT	6800	±20%	100KHz	25.00	1	0.04
PBS1608-103MT	10000	±20%	100KHz	32.80	0.8	0.02

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

 Irms:  $\Delta T=15^{\circ}\text{C}$  rise typ. at Irms

**ELECTRICAL CHARACTERISTICS**
**PBS Series Type 3316**

Part Number	L(uH)	Tolerance	Test Freq.	DCR( $\Omega$ )Max.	SRF(MHz)	Isat(A)	Irms(A)
PBS3316-1R0MT	1.0	$\pm 20\%$	100KHz	0.021	140	5.6	5.0
PBS3316-1R5MT	1.5	$\pm 20\%$	100KHz	0.022	120	5.2	4.5
PBS3316-2R2MT	2.2	$\pm 20\%$	100KHz	0.032	80	5.0	3.8
PBS3316-3R3MT	3.3	$\pm 20\%$	100KHz	0.039	70	3.9	3.3
PBS3316-4R7MT	4.7	$\pm 20\%$	100KHz	0.054	40	3.2	2.7
PBS3316-6R8MT	6.8	$\pm 20\%$	100KHz	0.075	38	2.8	2.2
PBS3316-100MT	10	$\pm 20\%$	100KHz	0.101	35	2.4	2.0
PBS3316-150MT	15	$\pm 20\%$	100KHz	0.150	25	2.0	1.5
PBS3316-220MT	22	$\pm 20\%$	100KHz	0.207	19	1.6	1.3
PBS3316-330MT	33	$\pm 20\%$	100KHz	0.334	15	1.4	1.1
PBS3316-470MT	47	$\pm 20\%$	100KHz	0.472	13	1.0	0.8

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

 Irms:  $\Delta T=15^{\circ}\text{C}$  rise typ. at Irms

**PBS Series Type 5022**

Part Number	L(uH)	Tolerance	Test Freq.	DCR( $\Omega$ )Max.	SRF(MHz)	Isat(A)	Irms(A)
PBS5022-100MT	10	$\pm 20\%$	100KHz	0.040	30	8.00	3.90
PBS5022-150MT	15	$\pm 20\%$	100KHz	0.048	20	7.00	3.40
PBS5022-220MT	22	$\pm 20\%$	100KHz	0.059	18	6.00	3.10
PBS5022-330MT	33	$\pm 20\%$	100KHz	0.075	14	5.00	2.80
PBS5022-470MT	47	$\pm 20\%$	100KHz	0.097	10	4.00	2.40
PBS5022-680MT	68	$\pm 20\%$	100KHz	0.138	9.0	3.00	2.00
PBS5022-101MT	100	$\pm 20\%$	100KHz	0.207	7.0	2.40	1.70
PBS5022-151MT	150	$\pm 20\%$	100KHz	0.293	6.0	2.10	1.30
PBS5022-221MT	220	$\pm 20\%$	100KHz	0.470	5.0	1.90	1.10
PBS5022-331MT	330	$\pm 20\%$	100KHz	0.780	4.0	1.10	0.86
PBS5022-471MT	470	$\pm 20\%$	100KHz	1.080	3.0	1.10	0.73
PBS5022-681MT	680	$\pm 20\%$	100KHz	1.400	2.5	0.96	0.64
PBS5022-102MT	1000	$\pm 20\%$	100KHz	2.010	2.0	0.80	0.53

Test at 100KHz , 0.1Vrms

Isat: Inductance drop 10% typ. at rated Isat.

 Irms:  $\Delta T=15^{\circ}\text{C}$  rise typ. at Irms