Chip Ferrite Bead BLM18□□□□□□N1□ Reference Specification

1.Scope

This reference specification applies to Chip Ferrite Bead BLM18_ N Series.

2.Part Numbering

(ex.) <u>BL</u> <u>M</u> <u>18</u> <u>AG</u> <u>121</u> <u>S</u> <u>N</u> <u>1</u> <u>D</u> (1) (2) (3) (4) (5) (6) (7) (8) (9)

(1)Product ID (2)Type (3)Dimension(L×W) (4)Characteristics (5)Typical Impedance at 100MHz (6)Performance (7)Category (8)Numbers of Circuit (9)Packaging(D:Taping / B:Bulk)

3.Rating

Customer Part Number	.Rating								
Customer Part Number Part			Impedance (Ω)		Rated		DC Resistance		
Part Number	Customer	MURATA							Domark
Typical 85°C 125°C Values Testing	Part Number	Part Number	resting C	<u> </u>		` ' '			Remark
BLM18RK121SN1D BLM18RK221SN1D BLM18RK221SN1D BLM18RK221SN1D BLM18RK221SN1D BLM18RK221SN1D BLM18RK271SN1D BLM18RK471SN1D 470±25% 470 200 0.50 0.60 Digital Interface BLM18RK471SN1D BLM18RK471SN1D 600±25% 600 200 0.60 0.70 BLM18RK601SN1D BLM18RK102SN1D 1000±25% 1000 200 0.80 0.90 BLM18RK102SN1D BLM18PG30SN1D 20 min. 30 1000 0.05 0.10 BLM18PG30SN1D BLM18PG30SN1D 33±25% 33 3000*1 1000*1 0.025 0.050 BLM18PG30SN1D BLM18PG60SN1D BLM18PG60SN1D BLM18PG60SN1D BLM18PG612ISN1D BLM18PG612ISN1D BLM18PG612ISN1D BLM18PG612ISN1D BLM18PG622ISN1D BLM18PG622ISN1D BLM18PG622ISN1D BLM18PG622ISN1D BLM18PG33ISN1D BLM18PG31ISN1B 30±25% 330 1200*1 1000*1 0.10 0.14 BLM18PG31ISN1D BLM18PG33ISN1D BLM18PG31ISN1D BLM18PG31ISN1D BLM18PG33ISN1D BLM18PG31ISN1D BLM18PG31ISN1				Typical	85°C		Values		
BLM18RK215N1D BLM18RK221SN1D BLM18RK221SN1D BLM18RK221SN1D 470±25% 470 200 0.50 0.60 Digital Interface		BLM18RK121SN1D	120 : 25%	100			0.25		
BLM18RK221SN1B BLM18RK471SN1D A70±25% 470 200 0.50 0.60 Digital Interface		BLM18RK121SN1B	120±25%	120	20	00	0.25	0.35	
BLM18RK221SN1B BLM18RK471SN1D BLM18RK471SN1D BLM18RK471SN1D BLM18RK601SN1D BLM18RK601SN1D BLM18RK601SN1D BLM18RK601SN1D BLM18RK601SN1D BLM18RK102SN1D BLM18RK102SN1D BLM18RK102SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG30SN1D BLM18PG330SN1D BLM18PG330SN1D BLM18PG330SN1D BLM18PG30SN1D BLM18PG30SN1D BLM18PG60SN1D BLM18PG60SN1D BLM18PG60SN1D BLM18PG60SN1D BLM18PG6121SN1D BLM18PG121SN1D BLM18PG181SN1D BLM18PG181SN1D BLM18PG181SN1D BLM18PG21SN1D BLM18PG21SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PG471SN1D BLM18PS300SN1D BLM18SP300SN1D BLM18SP101SN1D BLM18SP21SN1D BLM18SP21SN1D BLM18SP21SN1D BLM18SP21SN1D BLM18SP21SN1D BLM18SP601SN1D		BLM18RK221SN1D	220+25%	220	20	20	0.30	0.40	
BLM18RK471SN1B House Hou			220±23 /0	220	20	<i></i>	0.30	0.40	For
BLM18RK601SN1B 600±25% 600 200 0.60 0.70			470+25%	470	20	00	0.50	0.60	
BLM18RK601SN1D BLM18RK001SN1B BLM18RK102SN1D BLM18RK102SN1D BLM18RK102SN1D BLM18RK102SN1D BLM18RK102SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG30SN1D BLM18PG30SN1D BLM18PG30SN1D BLM18PG30SN1D BLM18PG600SN1B 40 min. 60 1000 0.1 0.25 0.050 BLM18PG600SN1B BLM18PG60OSN1D BLM18PG60OSN1D BLM18PG60OSN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1B 180±25% 120 2000*1 1000*1 0.05 0.10 BLM18PG121SN1D BLM18PG31SN1D BLM18PG31SN1D BLM18PG321SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG471SN1D BLM18PF300SN1D 30±10 30 6000*1 4000*1 0.022 0.026 BLM18SP101SN1D BLM18SP201SN1D BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP221SN1D BLM18SP221SN1D BLM18SP601SN1D BLM18SP60			47012070	470	20		0.50	0.00	•
BLM18RK010SN1B BLM18RK102SN1B BLM18RK102SN1B BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG600SN1D BLM18PG600SN1D BLM18PG600SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG121SN1D BLM18PG21SN1D BLM18PG21SN1D BLM18PG21SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG221SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG331SN1D BLM18PG371SN1D BLM18PG30SN1D BLM18PG31SN1D BLM18PG			600+25%	600	20	00	0.60	0.70	moriaco
BLM18RK102SN1B 1000±25% 1000 200 0.80 0.90			00012070	000	2.		0.00	0.70	
BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1D BLM18PG300SN1B 33±25% 33 3000*1 1000*1 0.025 0.050			1000+25%	1000	20	00	0.80	0.90	
BLM18PG300SN1B 20 min. 30 1000 0.05 0.10 BLM18PG300SN1D 33±25% 33 3000*1 1000*1 0.025 0.050 BLM18PG600SN1D 40 min. 60 1000 0.1 0.2 BLM18PG600SN1B 40 min. 60 1000 0.1 0.2 BLM18PG6121SN1D 120±25% 120 2000*1 1000*1 0.05 0.10 BLM18PG181SN1D 180±25% 180 1500*1 1000*1 0.09 0.18 BLM18PG31SN1D 220±25% 220 1400*1 1000*1 0.10 0.14 BLM18PG331SN1D 330±25% 330 1200*1 1000*1 0.15 0.20 BLM18PG331SN1B 330±25% 330 1200*1 1000*1 0.15 0.20 BLM18PG471SN1D 470±25% 470 1000 0.20 0.26 BLM18PG30SN1D 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP300SN1B 100±25% 100 3700*1 2500*1 0.022 0.026 BLM18SP101SN1D BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP221SN1D BLM18SP221SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0.185 0.222 BLM18SP102SN1D 10			1000=2070	1000			0.00	0.00	
BLM18PG330SN1D 33±25% 33 3000*1 1000*1 0.025 0.050 BLM18PG330SN1D 40 min. 60 1000 0.1 0.2 BLM18PG600SN1B 40 min. 60 1000 0.1 0.2 BLM18PG121SN1D 120±25% 120 2000*1 1000*1 0.05 0.10 BLM18PG121SN1B 180±25% 180 1500*1 1000*1 0.09 0.18 BLM18PG331SN1D 180±25% 220 1400*1 1000*1 0.10 0.14 BLM18PG221SN1D 220±25% 220 1400*1 1000*1 0.15 0.20 BLM18PG331SN1D 330±25% 330 1200*1 1000*1 0.15 0.20 BLM18PG331SN1D 30±25% 470 1000 0.20 0.26 BLM18PG471SN1D 470±25% 470 1000 0.20 0.26 BLM18PG471SN1D 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP300SN1D 30±10 30 6000*1 4000*1 0.002 0.26 BLM18SP101SN1D 100±25% 100 3700*1 2500*1 0.022 0.026 BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP221SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP601SN1D BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0.185 0.222			20 min	30	10	00	0.05	0.10	
BLM18PG330SN1B 33±25% 33 3000* 1000* 0.025 0.050 BLM18PG600SN1D 40 min. 60 1000 0.1 0.2 BLM18PG600SN1B 120±25% 120 2000*1 1000*1 0.05 0.10 BLM18PG121SN1D 180±25% 180 1500*1 1000*1 0.09 0.18 BLM18PG381SN1D 180±25% 220 1400*1 1000*1 0.10 0.14 BLM18PG331SN1D 220±25% 220 1400*1 1000*1 0.15 0.20 BLM18PG331SN1B 330±25% 330 1200*1 1000*1 0.15 0.20 BLM18PG371SN1D 470±25% 470 1000 0.20 0.26 BLM18PG371SN1D 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP300SN1D 30±10 3700*1 2500*1 0.022 0.026 BLM18SP101SN1D 100±25% 100 3700*1 2500*1 0.040 0.048 BLM18SP21SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP221SN1D 8LM18SP601SN1D 600±25% 600 1500*1 1000*1 0.140 0.168 BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0.185 0.222							0.00	00	
BLM18PG600SN1B			33±25%	33	3000*1	1000*1	0.025	0.050	
BLM18PG600SN1B					1000 2000*1 1000*1 1500*1 1000*1			-	
BLM18PG121SN1D 120±25% 120 2000*1 1000*1 0.05 0.10 BLM18PG181SN1D 180±25% 180 1500*1 1000*1 0.09 0.18 BLM18PG181SN1B 180±25% 220 1400*1 1000*1 0.10 0.14 BLM18PG221SN1D 220±25% 220 1400*1 1000*1 0.15 0.20 BLM18PG331SN1D 330±25% 330 1200*1 1000*1 0.15 0.20 BLM18PG331SN1B 470±25% 470 1000 0.20 0.26 BLM18PG471SN1D 470±25% 470 1000 0.20 0.26 BLM18PG471SN1D 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP300SN1D 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP101SN1D 100±25% 100 3700*1 2500*1 0.022 0.026 BLM18SP101SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP21SN1D 220±25% 600 1500*1 1000*1 0.140 0.168 BLM18SP601SN1D 600±25% 600 1500*1 0.08*1 0.185 0.222			40 min.	60			0.1	0.2	
BLM18PG121SN1B 120±25% 120 2000** 1000** 0.05 0.10 BLM18PG181SN1D 180±25% 180 1500** 1000** 0.09 0.18 BLM18PG281SN1D 220±25% 220 1400** 1000** 0.10 0.14 BLM18PG331SN1D 330±25% 330 1200** 1000** 0.15 0.20 BLM18PG471SN1D 470±25% 470 1000 0.20 0.26 BLM18PG471SN1B 30±10 30 6000** 4000** 0.008 0.010 BLM18SP300SN1D 30±10 3700** 2500** 0.022 0.026 BLM18SP101SN1D 100±25% 100 3700** 2500** 0.040 0.048 BLM18SP21SN1D 220±25% 220 2800** 1900** 0.140 0.168 BLM18SP601SN1D 600±25% 600 1500** 1000** 0.140 0.168 BLM18SP102SN1D 1000+25% 1000 1200** 800** 0.185 0.222									
BLM18PG181SN1D			120±25%	120			0.05	0.10	
BLM18PG181SN1B 180±25% 180 1500* 1000* 0.09 0.18									
BLM18PG221SN1D 220±25% 220			180±25%	180			0.09	0.18	
BLM18PG221SN1B 220±25% 220 1400*1 1000*1 0.10 0.14									
BLM18PG331SN1D 330±25% 330 1200*1 1000*1 0.15 0.20 Por DC			220±25%	220	1400*1	1000*1	0.10	0.14	For DC
BLM18PG331SN1B 330±25% 330 1200*1 1000*1 0.15 0.20 For DC power line									
BLM18PG471SN1D 470±25% 470 1000 0.20 0.26			330±25%	330	1200*1	1000*	0.15	0.20	
BLM18SP300SN1D 30±10 30 6000*1 4000*1 0.008 0.010			470 : 050/	470	40	00	0.00	0.00	power line
BLM18SP300SN1B 30±10 30 6000*1 4000*1 0.008 0.010 BLM18SP101SN1D 100±25% 100 3700*1 2500*1 0.022 0.026 BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP601SN1D 600±25% 600 1500*1 1000*1 0.140 0.168 BLM18SP102SN1D 1000±25% 1000 1200*1 800*1 0.185 0.222		BLM18PG471SN1B	470±25%	470	10	00	0.20	0.26	
BLM18SP300SN1B 100±25% 100 3700*1 2500*1 0.022 0.026		BLM18SP300SN1D	00.40		0000#1	4000#1		0.040	
BLM18SP101SN1B 100±25% 100 3700*1 2500*1 0.022 0.026 BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP601SN1D 600±25% 600 1500*1 1000*1 0.140 0.168 BLM18SP102SN1D 1000±25% 1000 1200*1 800*1 0.185 0.222		BLM18SP300SN1B	30±10	30	6000*1	4000*1	0.008	0.010	
BLM18SP101SN1B BLM18SP221SN1D 220±25% 220 2800*1 1900*1 0.040 0.048		BLM18SP101SN1D	400.0504	400	0700#1	0=00+1			
BLM18SP221SN1D BLM18SP221SN1B 220±25% 220 2800*1 1900*1 0.040 0.048 BLM18SP601SN1D BLM18SP601SN1B BLM18SP102SN1D 1000+25% 1000 1200*1 1000*1 0.140 0.168		BLM18SP101SN1B	100±25%	100	3700*1	2500*1	0.022	0.026	
BLM18SP221SN1B BLM18SP601SN1D BLM18SP601SN1B BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0.140 0.168									
BLM18SP601SN1B 600±25% 600 1500*1 1000*1 0.140 0.168 BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0.185 0.222		BLM18SP221SN1B	220±25% 220		2800*1 1	1900*1	900*1 0.040	0.048	
BLM18SP601SN1B BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0 185 0 222		BLM18SP601SN1D							
BLM18SP102SN1D 1000+25% 1000 1200*1 800*1 0 185 0 222			600±25%	600±25% 600		1000*1	0.140	0.168	
			4000+050/	4000	4000*1	000*1	0.405	0.000	
BLM18SP102SN1B 1000 1200 000 0.103 0.222	_	BLM18SP102SN1B	1000±25%	1000	1200*1	800^1	0.185	0.222	

			Impedance (Ω)		Rated		sistance	
Customer	MURATA	MURATA (at 100MHz, Under Standard Testing Condition)		Current (mA)		(Ω max.)		
Part Number	Part Number	l esting C				Initial	Values After	Remark
			Typical	at 85°C	at 125°C	Values	Testing	
	DI M40KC224CN4D						resuing	
	BLM18KG221SN1D BLM18KG221SN1B	220±25%	220	2200*1	1500*1	0.050	0.060	
	BLM18KG331SN1D							
	BLM18KG331SN1B	330±25%	330	1700*1	1200*1	0.080	0.095	
	BLM18KG471SN1D	4-4 : 4-4 :		. = 1				
	BLM18KG471SN1B	470±25%	470	1500*1	1000*1	0.130	0.145	
	BLM18KG601SN1D	600±25%	000	1300*1	1000*1	0.450	0.405	For DC
	BLM18KG601SN1B	000±25%	600	1300	1000	0.150	0.165	power line
	BLM18KG102SN1D	1000±25%	1000	1000 ^{*1}	800*1	0.200	0.230	•
	BLM18KG102SN1B	1000±25%	1000	1000	800	0.200	0.230	
	BLM18SD220SN1D	22±25%	22	6000*1	2500*1	0.000	0.012	
	BLM18SD220SN1B	22123%	22	6000*1	3500 ^{*1}	0.008	0.013	
	BLM18SG330SN1D	221050/	20	6000*1	2500*1	0.000	0.040	
	BLM18SG330SN1B	33±25%	33	6000*1	3500 ^{*1}	0.008	0.013	
	BLM18AG121SN1D	400:050/	400		20	0.40	0.00	
	BLM18AG121SN1B	120±25%	120	80	JU	0.18	0.28	
	BLM18AG151SN1D	150:050/	150	7/	20	0.05	0.25	
	BLM18AG151SN1B	150±25%	150	70)0	0.25	0.35	
	BLM18AG221SN1D	000.000/	220	70	20	0.05	0.05	
	BLM18AG221SN1B	220±25%	220	700 600 550 500 450		0.25	0.35	For general use
	BLM18AG331SN1D	330±25%	330			0.30	0.40	
	BLM18AG331SN1B	330±23%	330			0.30	0.40	
	BLM18AG471SN1D	470±25%	470			0.35	0.45	
	BLM18AG471SN1B	47012370	470			0.55	0.43	
	BLM18AG601SN1D	600±25%	600			0.38	0.48	
	BLM18AG601SN1B	00012070	000			0.00	0.10	
	BLM18AG102SN1D	1000±25%	1000			0.50	0.60	
	BLM18AG102SN1B							
	BLM18BB050SN1D	5±25%	5	80	00	0.05	0.10	
	BLM18BB050SN1B	-	_					
	BLM18BA050SN1D	5±25%	5	50	00	0.2	0.3	
	BLM18BA050SN1B							
	BLM18BB100SN1D	10±25%	10	70	00	0.10	0.20	
	BLM18BB100SN1B							
	BLM18BA100SN1D	10±25%	10	50	00	0.25	0.35	
-	BLM18BA100SN1B BLM18BB220SN1D					-		
	BLM18BB220SN1B	22±25%	22	700 500 600		0.20	0.30	
	BLM18BA220SN1D							
	BLM18BA220SN1B	22±25%	22			0.35	0.45	For
	BLM18BB470SN1D							high speed
	BLM18BB470SN1B	47±25%	47			0.25	0.35	signal line
	BLM18BD470SN1D					<u> </u>		
	BLM18BD470SN1B	47±25%	47	500		0.3	0.4	
	BLM18BA470SN1D	,=:	47 200			6 ==		
	BLM18BA470SN1B	47±25%	47	300		0.55	0.65	
	BLM18BB600SN1D	00.050/				0.05	0.07	
	BLM18BB600SN1B	60±25%	60	600		0.25	0.35	
	BLM18BA750SN1D	75.1050/	75	0.4	20	0.70	0.00	
	BLM18BA750SN1B	75±25%	75	30	00	0.70	0.80	
	BLM18BB750SN1D	75+050/	75	600		0.30	0.40	
	BLM18BB750SN1B	75±25%	75	00	JU	0.30	0.40	

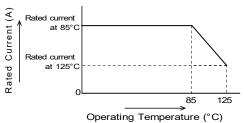
		Impedance (Ω)		Rated		DC Resistance			
0	Customer MURATA (at 100MHz, Under Standard Testing Condition)			Current		(Ω max.)			
_			(m		Initial	Values	Remark		
Fait Number	Fait Nullibei		Typical	at	at	Values	After		
			Турісаі	85°C	125°C	values	Testing		
	BLM18BB121SN1D	120±25%	120	5,	50	0.30	0.40		
	BLM18BB121SN1B	12012370	120	3.	JU	0.50	0.40		
	BLM18BD121SN1D	120±25%	120	20	00	0.4	0.5		
	BLM18BD121SN1B	12012370	120	30	<i>.</i>	0.4	0.5		
	BLM18BA121SN1D	120±25%	120	20	00	0.9	1.0		
	BLM18BA121SN1B	12012370	120	20	<i>.</i>	0.9	1.0		
	BLM18BB141SN1D	140±25%	140	50	20	0.35	0.45		
	BLM18BB141SN1B	14012370	140	30	<i>.</i>	0.55	0.43		
	BLM18BB151SN1D	150±25%	150	45	50	0.37	0.47		
	BLM18BB151SN1B	15012570	130	40	JU	0.57	0.47		
	BLM18BD151SN1D	150±25%	150	3(00	0.4	0.5		
	BLM18BD151SN1B	10012070	100	30		0.4	0.5		
	BLM18BB221SN1D	220±25%	220	11	50	0.45	0.55		
	BLM18BB221SN1B	ZZU±ZJ /0	220	43	,,,	0.40	0.00		
	BLM18BD221SN1D	220±25%	220	21	50	0.45	0.55		
	BLM18BD221SN1B	ZZU±ZJ /0	220	23	<i></i>	0.40	0.00		
	BLM18BB331SN1D	330±25%	330	10	00	0.58	0.68	7	
	BLM18BB331SN1B	330±23 /6	330	40	<i>,</i>	0.56	0.00	For	
	BLM18BD331SN1D	330±25%	330	21	250		0.6	high speed	
	BLM18BD331SN1B	330±23%	330	250		0.5	0.6	signal line	
	BLM18BD421SN1D	420+250/	420 250		-0	0.55 0.65			
	BLM18BD421SN1B	420±25%	420	250		0.55	0.05		
	BLM18BB471SN1D	470+250/	470	470 300		0.05	0.05		
	BLM18BB471SN1B	470±25%	470	30	JU	0.85	0.95		
	BLM18BD471SN1D	.M18BD471SN1D 470+359/ 470		21	=0	0.55	0.65		
	BLM18BD471SN1B	470±25%	470	250 200 200		0.55	0.03		
	BLM18BD601SN1D	600±25%	600			0.65	0.75		
	BLM18BD601SN1B	000±25%	000			0.05	0.75		
	BLM18BD102SN1D	1000±25%	1000			0.85	0.95		
	BLM18BD102SN1B	1000±2576	1000	20	<i>,</i>	0.65	0.95		
	BLM18BD152SN1D	1500±25%	1500	11	=0	1.2	1.3		
	BLM18BD152SN1B	1500±25%	1500	150		1.2	1.3		
	BLM18BD182SN1D	1800±25%	1800	11	50	1.5	1.6		
	BLM18BD182SN1B	1000±25%	1600	13	50	1.5	1.0		
	BLM18BD222SN1D	2200+250/	2200	11	-0	1.5	1.6		
	BLM18BD222SN1B	2200±25%	2200	13	50	1.5	1.6		
	BLM18BD252SN1D	2500±25%	2500	11	50	1.5	1.6		
	BLM18BD252SN1B	ZUUU±ZU /0	2000	150		1.0	1.0		
	BLM18TG121TN1D	120-250/	100	200		0.05	0.3		
	BLM18TG121TN1B	120±25%	120		JU	0.25	0.3		
	BLM18TG221TN1D	000:050/	000	-		0.0	0.4	For	
	BLM18TG221TN1B	220±25%	220	20	JU	0.3	0.4	For general	
	BLM18TG601TN1D						_	use	
	BLM18TG601TN1B	600±25%	600	20	00	0.45	0.6	(Thin type)	
	BLM18TG102TN1D							,	
	BLM18TG102TN1B	1000±25%	1000	000 100		0.6	8.0		
	BLM18SG260TN1D								
	BLM18SG260TN1B	26±25%	26	6000*1	1000*1	0.007	0.012		
	BLM18SG700TN1D		1				1	For DC	
	BLM18SG700TN1B	70±25%	70	4000*1	1000*1	0.020	0.030	power line	
	BLM18SG121TN1D		1				1	(Thin type)	
		120±25%	120	3000*1	1000*1	0.025	0.035		
	BLM18SG121TN1B		<u> </u>				<u> </u>		

Customer Part Number	MURATA Part Number	Impedance (9 (at 100MHz, Under S Testing (Standard Condition)	Rated Current (mA)		DC Resistance (Ω max.)		Remark
			Typical	at 85°C	at 125℃	Values	After Testing	
	BLM18SG221TN1D BLM18SG221TN1B	220±25%	220	2500*1	1000*1	0.040	0.055	
	BLM18SG331TN1D BLM18SG331TN1B	330±25%	330	1500* ¹	1000*1	0.070	0.085	
	BLM18SN220TN1D BLM18SN220TN1B	22±7	22	8000*1	5000*1	0.004	0.005	
	BLM18KG260TN1D BLM18KG260TN1B	26±25%	26	6000*1	4000*1	0.007	0.012	For DC power line
	BLM18KG300TN1D BLM18KG300TN1B	30±25%	30	5000*1	3300*1	0.010	0.015	(Thin type)
	BLM18KG700TN1D BLM18KG700TN1B	70±25%	70	3500*1	2200*1	0.022	0.032	
	BLM18KG101TN1D BLM18KG101TN1B	100±25%	100	3000*1	1900*1	0.030	0.040	
	BLM18KG121TN1D BLM18KG121TN1B	120±25%	120	3000*1	1900*1	0.030	0.040	

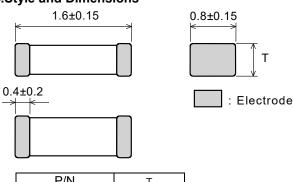
• Operating Temperature : -55°C to +125°C

• Storage Temperature : -55°C to +125°C

(*1)In case of Rated current is more than 1A, Rated Current is derated as right figure depending on the operating temperature.

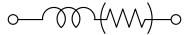


4.Style and Dimensions



P/N	Т
BLM18SG***TN1*	0.5±0.15
BLM18SN***TN1*	0.6±0.15
BLM18TG***TN1*	0.6±0.1
BLM18KG***TN1*	0.6±0.15
BLM18*****SN1*	0.8±0.15

■ Equivalent Circuit



Resistance element becomes dominant at high frequencies.

■ Unit Mass (Typical value) BLM18*****SN1*:0.005g BLM18*****TN1*:0.004g

5.Marking

No marking.

6.Standard Testing Conditions

< Unless otherwise specified >

Temperature : Ordinary Temp. (15 $^{\circ}$ C to 35 $^{\circ}$ C) Humidity : Ordinary Humidity (25%(RH) to 85%(RH))

(in mm)

< In case of doubt >

Temperature : 20°C±2 °C Humidity : 60%(RH) to 70%(RH)

Atmospheric pressure: 86kPa to 106kPa

7.Specifications 7-1.Electrical Performance

No.	Item	Specification	Test Method
7-1-1	Impedance	Meet item 3.	Measuring Frequency: 100MHz±1MHz Measuring Equipment: KEYSIGHT 4991A or the equivalent Test Fixture: KEYSIGHT 16192A or the equivalent
7-1-2	DC Resistance	Meet item 3.	Measuring Equipment : Digital multi meter For BLM18SN_TN Measuring Equipment : YOKOGAWA 755611 or the equivalent Test Fixture : KEYSIGHT 16044A or the equivalent *Except resistance of the Substrate and Wire

7-2.Mechanical Performance

No.	Item		pecification	Test Method	
	Appearance and Dimensions	Meet item 4.		Visual Inspection and measured with Slide Calipers.	
7-2-2	Bonding Strength	Meet Table 1. Table 1 Appearance Impedance Change (at 100MHz) DC Resistance	No damage Within ±30% (for BLM18SN_TN Within ±50%) Meet item 3.	It shall be soldered on the substrate. Applying Force(F): 6.8N Applying Time: 5s±1s Applied direction: Parallel to substrate Side view Substrate	
7-2-3	Bending Strength			It shall be soldered on the substrate. Substrate: Glass-epoxy 100mm×40mm×1.6mm Deflection: 1.0mm Speed of Applying Force: 0.5mm/s Keeping Time: 30s Pressure jig Product Deflection	
7-2-4	Vibration			It shall be soldered on the substrate. Oscillation Frequency: 10Hz to 55Hz to 10Hz for 1 min Total Amplitude: 1.5mm Testing Time: A period of 2 hours in each of 3 mutually perpendicular directions. (Total 6 h)	
7-2-5	Resistance to Soldering Heat Table 2 Appearance No damage Impedance Change (at 100MHz) Within ±30% (for BLM18KG Within ±40%) (for BLM18SN_TN Within ±50%)		No damage Within ±30% (for BLM18KG Within ±40%) (for BLM18SN_TN	Pre-Heating: 150°C±10°C, 60s~90s Solder: Sn-3.0Ag-0.5Cu Solder Temperature: 270°C±5°C Immersion Time: 10s±0.5s Immersion and emersion rates: 25mm/s Then measured after exposure in the room condition for 48h±4h.	
		DC Resistance	Meet item 3.		

No.	Item	Specification	Test Method
7-2-6	Drop	Products shall be no failure after	It shall be dropped on concrete or steel board.
		tested.	Method : free fall
			Height: 75cm
			Attitude from which the product is dropped: 3 direction
			The number of times: 3 times for each direction(Total 9 times)
7-2-7	Solderability	The electrodes shall be at least	Flux : Ethanol solution of rosin,25(wt)%
		95% covered with new solder	Pre-Heating : 150°C±10°C, 60s∼90s
		coating.	Solder : Sn-3.0Ag-0.5Cu
			Solder Temperature : 240°C±5°C
			Immersion Time : 3s±1s
			Immersion and emersion rates : 25mm/s

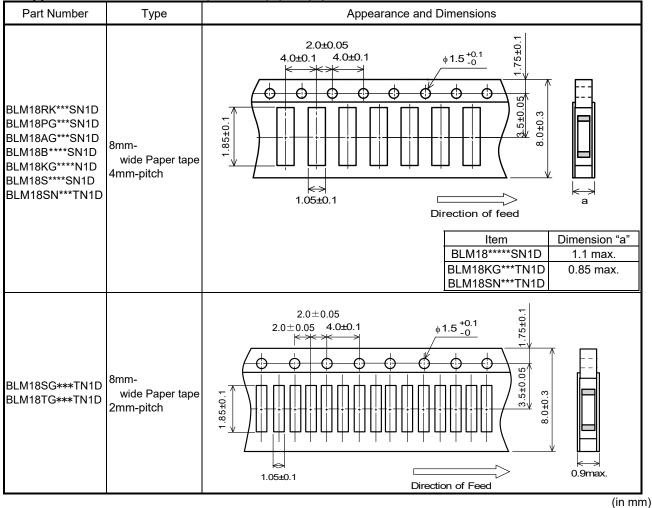
7-3. Environmental Performance

It shall be soldered on the substrate.

No.	Item	Specification		Test Method
7-3-1	Temperature Cycle	Meet Table 3. Table 3		1 cycle: 1 step:-55 °C(+0 °C,-3 °C) / 30min±3min 2 step:Ordinary temp. / 10min to 15min 3 step:+125 °C(+3 °C,-0 °C) / 30min±3min
		Appearance Impedance Change (at 100MHz)	No damage Within ±30% (for BLM18KG Within-10%to+50%) (for BLM18SN_TN Within ±50%)	4 step: Ordinary temp. / 10min to 15min Total of 100 cycles Then measured after exposure in the room condition for 48h±4h.
		DC Resistance	Meet item 3.	
7-3-2	Humidity	Meet Table 1.		Temperature: 40°C±2°C Humidity: 90%(RH) to 95%(RH) Time: 1000h(+48h,-0h) Then measured after exposure in the room condition for 48h±4h.
7-3-3	Heat Life			Temperature: 125°C±3°C (in case of Rated current is more than 1A, do the test at: +85 °C±3°C) Applying Current: Rated Current Time: 1000h(+48h,-0h) Then measured after exposure in the room condition for 48h±4h.
7-3-4	Cold Resistance			Temperature: -55±2°C Time: 1000h(+48h,-0h) Then measured after exposure in the room condition for 48h±4h.

8. Specification of Packaging

8-1.Appearance and Dimensions (8mm-wide paper tape)



(1) Taping

Products shall be packaged in the cavity of the base tape continuously and sealed by top tape and bottom tape.

- (2) Sprocket hole: The sprocket holes are to the right as the tape is pulled toward the user.
- (3) Spliced point: The base tape and top tape have no spliced point
- (4) Cavity: There shall not be burr in the cavity.
- (5) Missing components number

Missing components number within 0.025% of the number per reel or 1 pc., whichever is greater, and are not continuous. The specified quantity per reel is kept.

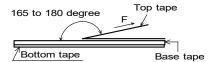
8-2. Tape Strength

(1)Pull Strength

Top tape	EN min
Bottom tape	5N min.

(2)Peeling off force of Top tape

0.1N to 0.6N (Minimum value is typical.) *Speed of Peeling off:300mm/min



8-3. Taping Condition

(1)Standard quantity per reel

Туре	Quantity per 180mm reel
BLM18(except BLM18SG/BLM18TG)	4000 pcs. / reel
BLM18SG/BLM18TG	10000 pcs. / reel

- (2)There shall be leader-tape (top tape and empty tape) and trailer- tape (empty tape) as follows.
- (3)On paper tape, the top tape and the base tape shall not be adhered at the tip of the empty leader tape for more than 5 pitch.

(4)Marking for reel

The following items shall be marked on a label and the label is stuck on the reel.

(Customer part number, MURATA part number, Inspection number(*1), RoHS Marking(*2), Quantity, etc)

*1) « Expression of Inspection No. »

<u>□</u> <u>0000</u> <u>×××</u>

(1) Factory Code (2) Date

Year / Last digit of year

First digit Second digit Month / Jan. to Sep. \rightarrow 1 to 9, Oct. to Dec. \rightarrow O, N, D

Third, Fourth digit: Day

(3) Serial No.

*2) « Expression of RoHS Marking »

ROHS $-\frac{Y}{(1)}(\underline{\Delta})$

- (1) RoHS regulation conformity parts.(2) MURATA classification number

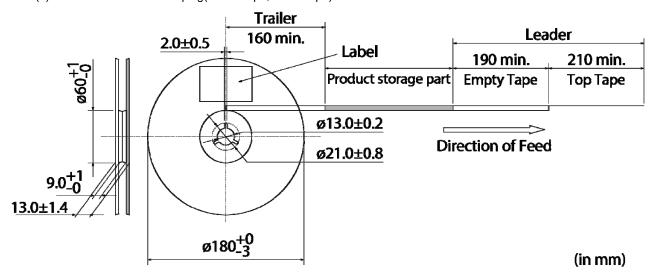
(5)Outside package

These reels shall be packed in the corrugated cardboard package and the following items shall be marked on a label and the label is stuck on the box.

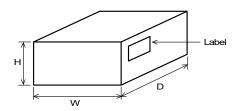
(Customer name, Purchasing order number, Customer part number, MURATA part number,

RoHS discrimination(*2), Quantity, etc)

(6)Dimensions of reel and taping(leader-tape, trailer-tape)



8-4. Specification of Outer Case



Outer	Case Dime (mm)	nsions	Standard Reel Quantity in Outer Case
W	D	Н	(Reel)
186	186	93	5

^{*} Above Outer Case size is typical. It depends on a quantity of an order.

9. 🗘 Caution

9-1.Surge current

Excessive surge current (pulse current or rush current) than specified rated current applied to the product may cause a critical failure, such as an open circuit, burnout caused by excessive temperature rise.

Please contact us in advance in case of applying the surge current.

9-2.Limitation of Applications

Please contact us before using our products for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

- (1) Aircraft equipment
- (6) Disaster prevention / crime prevention equipment
- (2) Aerospace equipment
- (7) Traffic signal equipment
- (3) Undersea equipment
- (8) Transportation equipment (vehicles, trains, ships, etc.)
- (4) Power plant control equipment
- (9) Data-processing equipment
- (5) Medical equipment
- (10) Applications of similar complexity and /or reliability requirements to the applications listed in the above

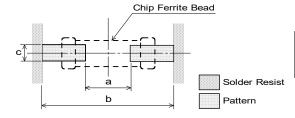
10. Notice

This product is designed for solder mounting.

Please consult us in advance for applying other mounting method such as conductive adhesive.

10-1.Land pattern designing

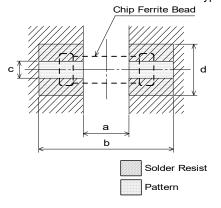
- Standard land dimensions
- < For BLM18 series (except BLM18P/BLM18S/BLM18K type) >



Туре	Soldering	а	b	С
BLM18 (except18P/18S/	Flow	8.0	2.5	0.7
BLM18K type)	Reflow	0.7	2.0	0.7

(in mm)

< For BLM18P/BLM18S/BLM18K type >



Туре	Rated	Soldering	а	b	С	Land pad thickness		
	Current					and dimension d		
	(A)					18µm	35µm	70µm
BLM18P BLM18S BLM18K	0.5 to 1.5	Flow/ Reflow	0.8	Flow 2.5 Reflow 2.0	0.7	0.7	0.7	0.7
	1.7 to 2.5					1.2	0.7	0.7
	3 to 4					2.4	1.2	0.7
	5 to 6					6.4	3.3	1.65
BLM18SN	8					-	6.4	3.3
BLM18SP	1.2 to 6.0						-	6.4

(in mm)

10-2. Soldering Conditions

Products can be applied to reflow and flow soldering.

(1) Flux, Solder

Ι.	i iux,coiuc				
	Flux	Use rosin-based flux, but not highly acidic flux (with chlorine content exceeding 0.2(wt)%.)			
		Do not use water-soluble flux.			
	Solder	Use Sn-3.0Ag-0.5Cu solder			
		Standard thickness of solder paste : 100 μm to 200 μm			

^{*}The excessive heat by land pads may cause deterioration at joint of products with substrate.

(2) Soldering conditions

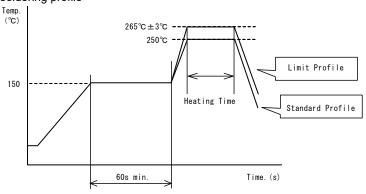
 Pre-heating should be in such a way that the temperature difference between solder and ferrite surface is limited to 150°C max. Also cooling into solvent after soldering should be in such a way that the temperature difference is limited to 100°C max.

Insufficient pre-heating may cause cracks on the ferrite, resulting in the deterioration of product quality.

Standard soldering profile and the limit soldering profile is as follows.
 The excessive limit soldering conditions may cause leaching of the electrode and / or resulting in the deterioration of product quality.

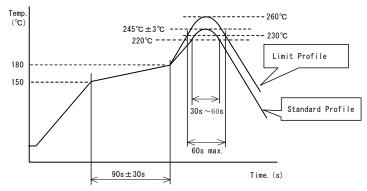
(3) soldering profile

□Flow soldering profile



	Standard Profile	Limit Profile
Pre-heating	150°C、60s min.	
Heating	250°C、4∼6s	265°C±3°C、5s max.
Cycle of flow	2 times	2 times

□Reflow soldering profile



	Standard Profile	Limit Profile
Pre-heating	150~180°C 、90s±30s	
Heating	above 220°C、30s∼60s	above 217°C、60s~150s
Peak temperature	245±3°C	260°C,10s
Cycle of reflow	2 times	2 times

10-3. Reworking with soldering iron

• Pre-heating: 150°C, 1 min • Soldering iron output: 80W max.

Tip temperature: 350°C max.
 Tip diameter: φ 3mm max.

• Soldering time : 3(+1,-0) seconds. • Times : 2times max.

Note :Do not directly touch the products with the tip of the soldering iron in order to prevent the crack on the ferrite material due to the thermal shock.

10-4. Solder Volume

Solder shall be used not to be exceeded as shown below.

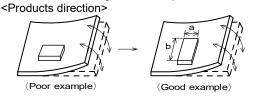


Accordingly increasing the solder volume, the mechanical stress to product is also increased. Exceeding solder volume may cause the failure of mechanical or electrical performance.

10-5.Attention regarding P.C.B. bending

The following shall be considered when designing and laying out P.C.B.'s.

(1) P.C.B. shall be designed so that products are not subject to the mechanical stress for board warpage.



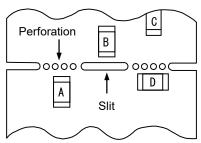
Products shall be located in the sideways direction (Length: a<b) to the mechanical stress.

(2)Components location on P.C.B. separation.

It is effective to implement the following measures, to reduce stress in separating the board.

It is best to implement all of the following three measures; however, implement as many measures as possible to reduce stress.

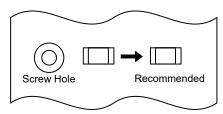
Contents of Measures	Stress Level
(1) Turn the mounting direction of the component parallel to the board separation surface.	A > D*1
(2) Add slits in the board separation part.	A > B
(3) Keep the mounting position of the component away from the board separation surface.	A > C



*1 A > D is valid when stress is added vertically to the perforation as with Hand Separation. If a Cutting Disc is used, stress will be diagonal to the PCB, therefore A > D is invalid.

(3) Mounting Components Near Screw Holes

When a component is mounted near a screw hole, it may be affected by the board deflection that occurs during the tightening of the screw. Mount the component in a position as far away from the screw holes as possible.



10-6.Mounting density

Add special attention to radiating heat of products when mounting the inductor near the products with heating. The excessive heat by other products may cause deterioration at joint of this product with substrate.

10-7. Operating Environment

Do not use this product under the following environmental conditions, on deterioration of the Insulation Resistance of the Ferrite material and/or corrosion of Inner Electrode may result from the use.

- (1) in the corrodible atmosphere such as acidic gases, alkaline gases, chlorine, sulfur gases, organic gases and etc. (the sea breeze, Cl₂, H₂S, NH₃, SO₂, NO₂,etc)
- (2) in the atmosphere where liquid such as organic solvent, may splash on the products
- (3) in the atmosphere where the temperature / humidity changes rapidly and it is easy to dew

10-8. Resin coating

The impedance value may change and/or it may affect on the product's performance due to high cure-stress of resin to be used for coating / molding products. So please pay your careful attention when you select resin. In prior to use, please make the reliability evaluation with the product mounted in your application set.

10-9. Cleaning Conditions

Products shall be cleaned on the following conditions.

- (1)Cleaning temperature shall be limited to 60°C max. (40°C max. for IPA.)
- (2)During ultrasonic cleaning, under some cleaning conditions, the resonation of PCB should be caused by its vibration. Be sure to do the test cleaning with actual cleaning equipment before production and confirm that product does not be damaged by cleaning.
- (3)Cleaner
 - 1.Alternative cleaner
 - •Isopropyl alcohol (IPA)
 - 2.Aqueous agent
 - •PINE ALPHA ST-100S
- (4) There shall be no residual flux and residual cleaner after cleaning.

In the case of using aqueous agent, products shall be dried completely after rinse with de-ionized water in order to remove the cleaner.

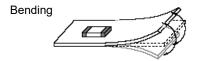
(5)Other cleaning

Please contact us.

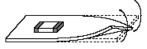
10-10. Handling of a substrate

After mounting products on a substrate, do not apply any stress to the product caused by bending or twisting to the substrate when cropping the substrate, inserting and removing a connector from the substrate or tightening screw to the substrate.

Excessive mechanical stress may cause cracking in the product.







10-11. Storage Conditions

(1)Storage period

Use the products within 6 months after delivered.

Solderability should be checked if this period is exceeded.

(2)Storage conditions

• Products should be stored in the warehouse on the following conditions.

Temperature : -10°C to 40°C

Humidity : 15% to 85% relative humidity

No rapid change on temperature and humidity

- Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidization of electrode, resulting in poor solderability.
- Products should be stored on the palette for the prevention of the influence from humidity, dust and so on.
- Products should be stored in the warehouse without heat shock, vibration, direct sunlight and so on.
- Avoid storing the product by itself bare (i.e.exposed directly to air).

(3)Delivery

Care should be taken when transporting or handling product to avoid excessive vibration or mechanical shock.

11 . 🗘 Note

- (1)Please make sure that your product has been evaluated in view of your specifications with our product being mounted to your product.
- (2)You are requested not to use our product deviating from the reference specifications.
- (3)The contents of this reference specification are subject to change without advance notice. Please approve our product specifications or transact the approval sheet for product specifications before ordering.