

定格 Rating	BNX002-01 (生産終息品 / Withdrawal)							BNX002-11 (代替品 / Substitute)						
	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature
	50	125	10	100	1MHz~1GHz:	40dB以上	-30~+85°C	50	125	10	100	1MHz~1GHz:	40dB以上	-40~+85°C
IL特性 Insertion Loss														
外觀、寸法 Style Dimensions														
表示 Marking	<p>社名 / Murata Mark 品名 / Part Number 製造年月 / Manufacturing Date</p>							<p>社名 / Murata Mark 品名 / Part Number 製造年月 / Manufacturing Date</p>						
取付け穴 寸法図 Dimensions of Installation Holes														

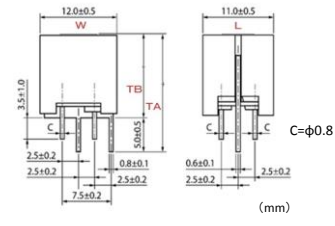
定格 Rating	BNX003-01 (生産終息品 / Withdrawal)						BNX003-11 (代替品 / Substitute)							
	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature
	150	375	10	100	5MHz~1GHz:	40dB以上	-30~+85°C	150	375	10	100	5MHz~1GHz:	40dB以上	-40~+85°C
IL特性 Insertion Loss	<p>Detailed description of the graph: The graph plots Insertion Loss in dB on the y-axis (0 to 80, increasing downwards) against Frequency in MHz on the x-axis (0.1 to 1000, logarithmic scale). Two data series are shown: a red dotted line for BNX003-01 (Withdrawal) and a blue solid line for BNX003-11 (Substitute). Both series show a similar trend, with a sharp increase in loss (decrease in dB value) around 5 MHz, reaching a minimum of approximately 75 dB at that frequency. Outside this range, the loss increases to about 45 dB at 0.1 MHz and 100 MHz.</p>													
外観、寸法 Style Dimensions	<p>Detailed description: Top view shows a rectangular component with a width of 12.0±0.5 mm and a height of 11.0±0.5 mm. Side view shows a total height of 13.0 mm (below) and 16.0 mm (below), with a mounting tab height of 5.0±0.5 mm. Pin diameters are φ0.8 mm. Pin spacing is 2.5 mm (±0.2 mm). Pin width is 0.8±0.1 mm. (単位: mm)</p>						<p>Detailed description: Top view shows a rectangular component with a width of 12.0±0.5 mm and a height of 11.0±0.5 mm. Side view shows a total height of 12.5 mm (below) and 16.0 mm (below), with a mounting tab height of 5.0±0.5 mm. Pin diameters are φ0.8 mm. Pin spacing is 2.5 mm (±0.2 mm). Pin width is 0.8±0.1 mm. (単位: mm)</p>							
表示 Marking	<p>Detailed description: The marking area contains the muRata logo, the part number BNX003-01, and two circles representing the manufacturing date. Arrows point to these elements with labels: 社名 / Murata Mark, 品名 / Part Number, and 製造年月 / Manufacturing Date.</p>						<p>Detailed description: The marking area contains the muRata logo, the part number BNX003-11, and two circles representing the manufacturing date. Arrows point to these elements with labels: 社名 / Murata Mark, 品名 / Part Number, and 製造年月 / Manufacturing Date.</p>							
取付け穴 寸法図 Dimensions of Installation Holes	<p>Detailed description: The diagram shows a 2x2 grid of installation holes. The top-left hole is labeled (PSG) and the top-right is (B). The bottom-left is (CG) and the bottom-right is (CB). Dimensions: (PSG) to (B) is φ1.2 mm. (PSG) to (CG) is 2.5±0.1 mm. (PSG) to (CB) is 5.0±0.1 mm. (B) to (CG) is 2.5±0.1 mm. (B) to (CB) is 7.5±0.1 mm. (単位: mm)</p>													

定格 Rating	BNX005-01 (生産終息品 / Withdrawal)						BNX005-11 (代替品 / Substitute)							
	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature	定格電圧 Rated Voltage V(DC)	耐電圧 Withstanding Voltage V(DC)	定格電流 Rated Current A(DC)	絶縁抵抗 Insulation Resistance MΩ	挿入損失 Insertion Loss		使用温度範囲 Operating Temperature
	50	125	15	100	1MHz~1GHz:	40dB以上	-30~+85°C	50	125	15	100	1MHz~1GHz:	40dB以上	-40~+85°C
IL特性 Insertion Loss														
外観、寸法 Style Dimensions														
表示 Marking	<p>社名 / Murata Mark 品名 / Part Number 製造年月 / Manufacturing Date</p>						<p>社名 / Murata Mark 品名 / Part Number 製造年月 / Manufacturing Date</p>							
取付け穴 寸法図 Dimensions of Installation Holes	<p>(単位:mm)</p>													

Initial Data & Reliability Test Comparison Data of BNX (-01& -11) series

添付資料
Appendix

撤退品番/Withdrawal part number:BNX002-01 (PEM)
代替品番/Alternative part number:BNX002-11 (NEM)

試験項目、条件 Testing Item, Condition	サンプル数 Sample Size	評価項目 Confirmed Item		撤退品番 Withdrawal PN	代替品番 Alternative PN	判定値 Acceptance Value	判定 OK/NG
1. 初期値/Initial 	30	L寸法/Dimension L(mm)	AVG	10.925	10.921	11.0±0.5 mm	OK
			MAX	10.99	10.99		
			MIN	10.88	10.87		
			σ	0.023	0.029		
		W寸法/Dimension W(mm)	AVG	11.997	11.973	12.0±0.5 mm	OK
			MAX	12.08	12.01		
			MIN	11.94	11.94		
			σ	0.036	0.019		
		TA寸法/Dimension T(mm)	AVG	16.560	16.600	18.0mm MAX	OK
			MAX	16.62	16.67		
			MIN	16.45	16.36		
			σ	0.042	0.063		
	TB寸法/Dimension T(mm)	AVG	11.400	11.407	12.5mm MAX (Withdrawal 13.0)	OK	
		MAX	11.49	11.44			
		MIN	11.32	11.34			
		σ	0.057	0.021			
	絶縁抵抗/ Insulation Resistance(MΩ)	AVG	2.42.E+04	3.85.E+03	100MΩ MIN.	OK	
		MAX	4.5.E+04	6.7.E+03			
		MIN	3.8.E+03	2.3.E+03			
		σ	-	-			
耐電圧/Dielectric Strength(V) 125DCV		OK	OK	No damaged	OK		
電圧降下/ Voltage Drop Rated current 10A	AVG	22.887	22.907	30mV MAX	OK		
	MAX	25.54	25.34				
	MIN	20.71	21.42				
	σ	1.565	1.343				
挿入損失/ Insertion Loss [IL] (dB)	30	(1MHz)	AVG	44.15	42.89	40dB MIN.	OK
			MAX	44.4	44.7		
			MIN	43.9	41.0		
		(10MHz)	AVG	73.14	71.38		
			MAX	74.2	72.9		
			MIN	72.0	70.0		
	(100MHz)	AVG	76.17	71.44			
		MAX	77.6	72.8			
		MIN	73.9	70.2			
	3	(1MHz)	AVG	42.48	41.94		
			MAX	42.6	42.9		
			MIN	42.4	41.1		
(10MHz)		AVG	42.69	41.53			
		MAX	43.2	41.6			
		MIN	42.1	41.5			
(100MHz)	AVG	71.99	71.77				
	MAX	76.7	74.9				
	MIN	69.0	68.1				
(1GHz)	AVG	72.27	70.72				
	MAX	77.8	73.5				
	MIN	69.1	67.7				
絶縁抵抗/ Insulation Resistance(MΩ)	AVG	3.71.E+03	5.25.E+03	30MΩ MIN.	OK		
	MAX	9.7.E+03	1.3.E+04				
	MIN	2.2.E+03	1.9.E+03				
耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK		
挿入損失/ Insertion Loss [IL] (dB)	3	(1MHz)	AVG	42.69	41.53	40dB MIN.	OK
			MAX	43.2	41.6		
			MIN	42.1	41.5		
		(10MHz)	AVG	71.99	71.77		
MAX			76.7	74.9			
MIN			69.0	68.1			
(100MHz)		AVG	72.27	70.72			
		MAX	77.8	73.5			
		MIN	69.1	67.7			
(1GHz)		AVG	41.88	41.57			
		MAX	42.3	42.1			
		MIN	41.4	40.5			
3. はんだ付け性/Solderability フラックス/Flux : Ethanol solution of rosin,25(wt)% 予熱/Pre-Heating : 150±10°C/60s はんだ/Solder : Sn-3.0Ag-0.5Cu はんだ温度/Solder Temperature : 245±5°C 浸せき時間/Immersion Time : 2±0.5s	10	濡れ面積/ New uniform coating area		OK	OK	>75%	OK

試験項目、条件 Testing Item, Condition	サンプル数 Sample Size	評価項目 Confirmed Item		撤退品番 Withdrawal PN	代替品番 Alternative PN	判定値 Acceptance Value	判定 OK/NG
4. はんだ耐熱性/Resistance to Soldering Heat 予熱/Pre-Heating : 150±10°C/60s はんだ/Solder : Sn-3.0Ag-0.5Cu はんだ温度/Solder Temperature : 270±10°C 浸せき時間/Immersion Time : 10 +0.5s,-0s	10	外観/Appearance		OK	OK	No damaged	OK
		絶縁抵抗/ Insulation Resistance(MΩ)	AVG	4.29E+03	5.75E+03	30MΩ MIN.	OK
			MAX	5.4E+03	6.7E+03		
			MIN	2.8E+03	4.6E+03		
	耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK	
	3	挿入損失/ Insertion Loss [IL] (dB) (1MHz)	AVG	43.21	42.19	40dB MIN.	OK
			MAX	43.5	42.8		
			MIN	43.0	41.7		
		(10MHz)	AVG	57.20	50.99		
			MAX	58.4	51.6		
			MIN	55.8	50.5		
		(100MHz)	AVG	64.92	59.47		
			MAX	65.3	60.7		
MIN			64.7	58.4			
(1GHz)		AVG	41.37	41.60			
		MAX	41.5	41.7			
		MIN	41.3	41.5			
5. 手はんだ耐熱性/Resistance to soldering iron はんだ/Solder : Sn-3.0Ag-0.5Cu こて先温度/Top Temperature : 350±10°C 浸せき時間/Time : 4±1s	10	外観/Appearance		OK	OK	No damaged	OK
		絶縁抵抗/ Insulation Resistance(MΩ)	AVG	4.99.E+03	6.18.E+03	30MΩ MIN.	OK
			MAX	7.0.E+03	7.5.E+03		
			MIN	3.9.E+03	5.0.E+03		
	耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK	
	3	挿入損失/ Insertion Loss [IL] (dB) (1MHz)	AVG	42.99	42.84	40dB MIN.	OK
			MAX	43.1	43.6		
			MIN	42.9	42.3		
		(10MHz)	AVG	59.35	53.25		
			MAX	59.9	55.5		
			MIN	58.8	52.1		
		(100MHz)	AVG	65.45	64.15		
			MAX	65.8	64.6		
MIN			65.2	63.9			
(1GHz)		AVG	41.55	41.5			
		MAX	41.6	41.6			
		MIN	41.5	41.4			
6. 温度サイクル/Temperature Cycle 1サイクル条件/1 Cycle condition (1) -40°C+0/-3°C, 30 min. (2) ordinary Temp. , (~5 min.) (3) +85°C+3/-0°C, 30 min. (4) ordinary Temp. , (~5 min.) 回数/Total of Cycles :1000 cycles	Withdrawal: 10 Alternative: 32	外観/Appearance		OK	OK	No damaged	OK
		絶縁抵抗/ Insulation Resistance(MΩ)	AVG	1.09.E+04	4.21.E+03	30MΩ MIN.	OK
			MAX	4.3.E+04	9.5.E+03		
			MIN	3.2.E+03	2.1.E+03		
	耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK	
	3	挿入損失/ Insertion Loss [IL] (dB) (1MHz)	AVG	42.32	42.24	40dB MIN.	OK
			MAX	42.4	42.3		
			MIN	42.2	42.2		
		(10MHz)	AVG	72.99	71.11		
			MAX	73.9	71.5		
			MIN	71.9	70.6		
		(100MHz)	AVG	70.40	70.27		
			MAX	70.9	70.5		
MIN			70.2	70.2			
(1GHz)		AVG	41.29	41.50			
		MAX	41.3	61.6			
		MIN	41.2	41.4			
7. 耐湿負荷試験/Humidity Life 温度/Temperature : 40±2°C 湿度/Humidity : 95%(RH) 印加電力/Rated Voltage : 50VDC 時間/Time : 1000h	Withdrawal: 10 Alternative: 32	外観/Appearance		OK	OK	No damaged	OK
		絶縁抵抗/ Insulation Resistance(MΩ)	AVG	4.23.E+02	4.43.E+02	30MΩ MIN.	OK
			MAX	6.6.E+02	3.3.E+03		
			MIN	3.6.E+02	1.2.E+02		
	耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK	
	3	挿入損失/ Insertion Loss [IL] (dB) (1MHz)	AVG	42.97	42.99	40dB MIN.	OK
			MAX	43.1	43.1		
			MIN	42.9	42.9		
		(10MHz)	AVG	72.3	72.29		
			MAX	72.6	72.7		
			MIN	72.2	71.8		
		(100MHz)	AVG	69.47	70.27		
			MAX	69.7	70.4		
MIN			69.2	70.0			
(1GHz)		AVG	42.84	43.17			
		MAX	43.0	43.3			
		MIN	42.7	43.1			
8. 高温負荷試験/Heat Life 温度/Temperature : 85±2°C 印加電力/Applying Voltage : Rated Voltage x 2 時間/Time : 1000h	Withdrawal: 10 Alternative: 32	外観/Appearance		OK	OK	No damaged	OK
		絶縁抵抗/ Insulation Resistance(MΩ)	AVG	1.60.E+03	9.04.E+03	30MΩ MIN.	OK
			MAX	9.3.E+03	1.9.E+04		
			MIN	2.2.E+02	2.5.E+02		
	耐電圧/Withstand Voltage(V) 50DCV		OK	OK	No failure	OK	
	3	挿入損失/ Insertion Loss [IL] (dB) (1MHz)	AVG	43.01	42.94	40dB MIN.	OK
			MAX	43.1	43.0		
			MIN	43.0	42.9		
		(10MHz)	AVG	70.44	72.20		
			MAX	71.3	72.5		
			MIN	69.7	71.9		
		(100MHz)	AVG	77.72	77.85		
			MAX	79.4	78.0		
MIN			75.3	77.6			
(1GHz)		AVG	43.08	43.14			
		MAX	43.2	43.2			
		MIN	42.9	43.0			