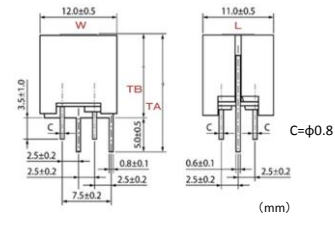


# Initial Data & Reliability Test Comparison Data of BNX (-01& -11) series

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		
<b>1. 初期値/Initial</b> 	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)	30	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	10	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			
		(1GHz)	AVG	42.48	41.94			
			MAX	42.6	42.9			
			MIN	42.4	41.1			
<b>2. 耐振性/Vibration</b> 振動周波数/Oscillation Frequency : 10 to 2000 to 10Hz for 20min. 加速度幅/Total Amplitude : 1.5mm 試験時間/Testing Time : A period of 2h in each of 3 mutually perpendicular directions (Total 6h)	10	外観/Appearance	OK	OK	No damaged	OK		
		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			
<b>3. はんだ付け性/Solderability</b> 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			