

# Product Information

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## HOW TO ORDER

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Standards products are recommended to be utilized.

Those products "●" marked before the model name are said standard products.

Since those "◆" marked are special models whose production facilities, production processes and specified components are special thus causing the lead time to be prolonged.

Confirm this when receiving orders.

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# MITSUMI Polyvaricon

1. "POLYVARICON" is the trade name of subminiature variable capacitors using polyethylene film as dielectric, which have been invented and developed at Mitsumi Electric Co.,Ltd. The outstanding features of these variable capacitors are numerous, including miniature size and lightweight, high resistance against howling, minimized radio frequency loss, high resistance to heat and moisture and durability.
2. "POLYVARICON" capacitors manufactured under an integrated process from the component parts to finished products at several factories are used in all parts of the world, and because of their good application record, they enjoy high reputation for high performance and high quality.
3. Rich variety of types make them capable of meeting all sorts of set design needs.
4. The pin type are POLYVARICONS that contribute to the manufacturing process reduction and quality upgrading. A rich variety is available to conform with user specifications.
5. Outstanding production technology, top-notch production equipment and automated machines assure stable supplies.
6. Easy to use and mechanically tough, these capacitors are effectively serving to reduce troubles arising in the set manufacturing process, since they are manufactured with the user interest as primary consideration.
7. Development of new products for expanding the range of application is being expedited by the powerful technical staff.

## Standard Products Are Recommended

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1. Standard MITSUMI Polyvaricons account for 95% of total output and are under stable production at all times.
2. All our customers can use standard products with perfect assurance as VA and quality improvements under a thoroughly automated systems are promoted at all times.
3. The merits of automation are used to best advantage to make possible delivery of massive quantities in a short delivery period.

## REFERENCE

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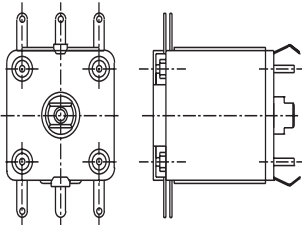
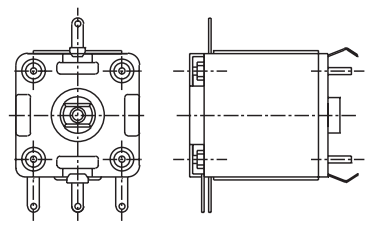
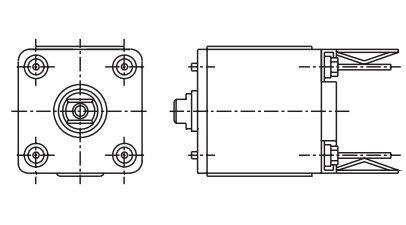
1. While this catalog contains data mostly on the types now under mass production, other specifications are also made available on request. Samples will be delivered in short period in order to satisfy user schedules.
  2. Page 28 contains methods of handling variable capacitors. Reference to this page is advised.
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# Classification of Appearance

## Standard Model Table

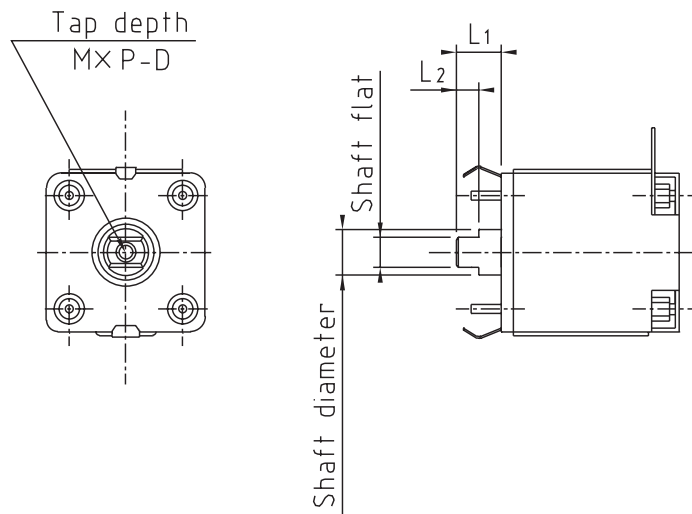
Dimension \ Application	AM 2-stage FM 2-stage (For 2-band)	AM 2-stage (For multi-band)	AM 2-stage FM 2-stage (For 2-band)	AM 2-stage FM 2-stage (For multi-band)
16□mm	<ul style="list-style-type: none"> <li>•2LHT16L7</li> <li>•2LHT16B7</li> <li>•2LHT16B8</li> </ul>		<ul style="list-style-type: none"> <li>•2LXT16L7</li> <li>•2LXT16B7</li> <li>•2LXT16B8</li> </ul>	
20□mm	<ul style="list-style-type: none"> <li>•2LHT-L5</li> <li>•2LHT-LD5</li> <li>•2LHT-L8</li> </ul>	<ul style="list-style-type: none"> <li>•2KT-L</li> </ul>	<ul style="list-style-type: none"> <li>•2LXT-L5</li> <li>•2LXT-LD5</li> <li>•2LXT-L8</li> </ul>	<ul style="list-style-type: none"> <li>•22KT-L</li> <li>•22KT-LD1</li> </ul>

## Terminal Shapes & Mounting Method

Self Supporting Type	Dip Soldering Type	Rear Mounting Type
<p>Superb in insertability and mountability, its fixing and wiring are simultaneously completed at soldering on the printed board without using any mounting screw. This system has made possible reduction in the manufacturing process.</p>	<p>It can be dipped in the solder together with other parts, and consideration given to heat resistance and flux penetration allows substantial streamlining of the manufacturing process.</p>	<p>The pin terminal is provided on the reverse side of the rotary shaft of the main unit. This allows mounting on the printed board from the inverted posture, offering special advantage in set mechanism designing.</p>
		

Standard shaft dimensions, printed board thickness types

Dimension		Item	Shaft Dimensions L <sub>1</sub> -L <sub>2</sub>	Shaft Diameter /Shaft Flat Ø-Flat	Screw Dimensions M×P_D	PC Board Thickness t
16□mm	Front Mounting		2-1.6	4-2.4	M1.7×0.35-3	1.2
	Rear Mounting		4-3.6			
20□mm	Front Mounting		4-2	6-4	M2.6×0.45-3	1.6
	Rear Mounting		4-2	6-4	M2.6×0.45-3	
	Dip Soldering		(3) -3	6-4	M2.6×0.45-3	



# Specification Table

## 20<sup>□</sup> mm Polyvaricon Specifications

Specifications		Dimensions (mm)	No. of Stage		max. Capacitance Swing (pF)	min. Capacitance (pF)	Variable Coefficient Curve	Tolerance of Variable Capacitance	Trimmer Capacitance Swing (pF)	Rotational Torque (g-cm)
Uses	Models									
AM/FM	•2LHT-L5	21×21×16.5	AM	2	(O) 82 (A) 160	(O) 3.8±1 (A) 3.4±1	(O) D (A) A	± (1pF+1.5%)	7 min.	70~350
			FM	2	20 (40)	(FC1) 3.3±1 (FC2) 3.8±1	B	± (0.3pF+2%)		
	•2LHT-LD5	21×21×19.5	AM	2	(O) 82 (A) 160	(O) 3.8±1 (A) 3.4±1	(O) D (A) A	± (1pF+1.5%)	7 min.	70~350
			FM	2	20 (40)	(FC1) 3.3±1 (FC2) 3.8±1	B	± (0.3pF+2%)		
	•2LHT-L8	21×21×12	AM	2	(O) 82 (A) 160	(O) 4.2±1 (A) 3.8±1	(O) D (A) A	±(1pF+1.5%)	7 min.	70~400
			FM	2	20 (40)	(FC1) 3.6±1 (FC2) 4.1±1	B	±(0.3pF+2%)		
AM/FM	•2LXT-L5	21×21×16.5	AM	2	(O) 82 (A) 140	(O) 3.8±1 (A) 3.4±1	(O) C (A) A	± (1pF+1.0%)	7 min.	70~350
			FM	2	20 (40)	(FC1) 3.3±1 (FC2) 3.8±1	B	± (0.3pF+2%)		
	•2LXT-LD5	21×21×19.5	AM	2	(O) 82 (A) 140	(O) 3.8±1 (A) 3.4±1	(O) C (A) A	± (1pF+1.0%)	7 min.	70~350
			FM	2	20 (40)	(FC1) 3.3±1 (FC2) 3.8±1	B	± (0.3pF+2%)		
	•2LXT-L8	21×21×12	AM	2	(O) 82 (A) 140	(O) 4.2±1 (A) 3.8±1	(O) C (A) A	±(1pF+1.0%)	7 min.	70~400
			FM	2	20 (40)	(FC1) 3.6±1 (FC2) 4.1±1	B	±(0.3pF+2%)		
AM Multi-band /FM	•22KT-L	21×21×20.7	AM	2	335	5±1.5	A	± (1pF+1.5%)	7 min.	70~450
			FM	2	20 (40)	3.5±1.5	B	±0.5pF		
	•22KT-LD1	21×21×23.7	AM	2	335	5±1.5	A	± (1pF+1.5%)	7 min.	70~450
			FM	2	20 (40)	3.5±1.5	B	±0.5pF		

Note : • Standard Type.

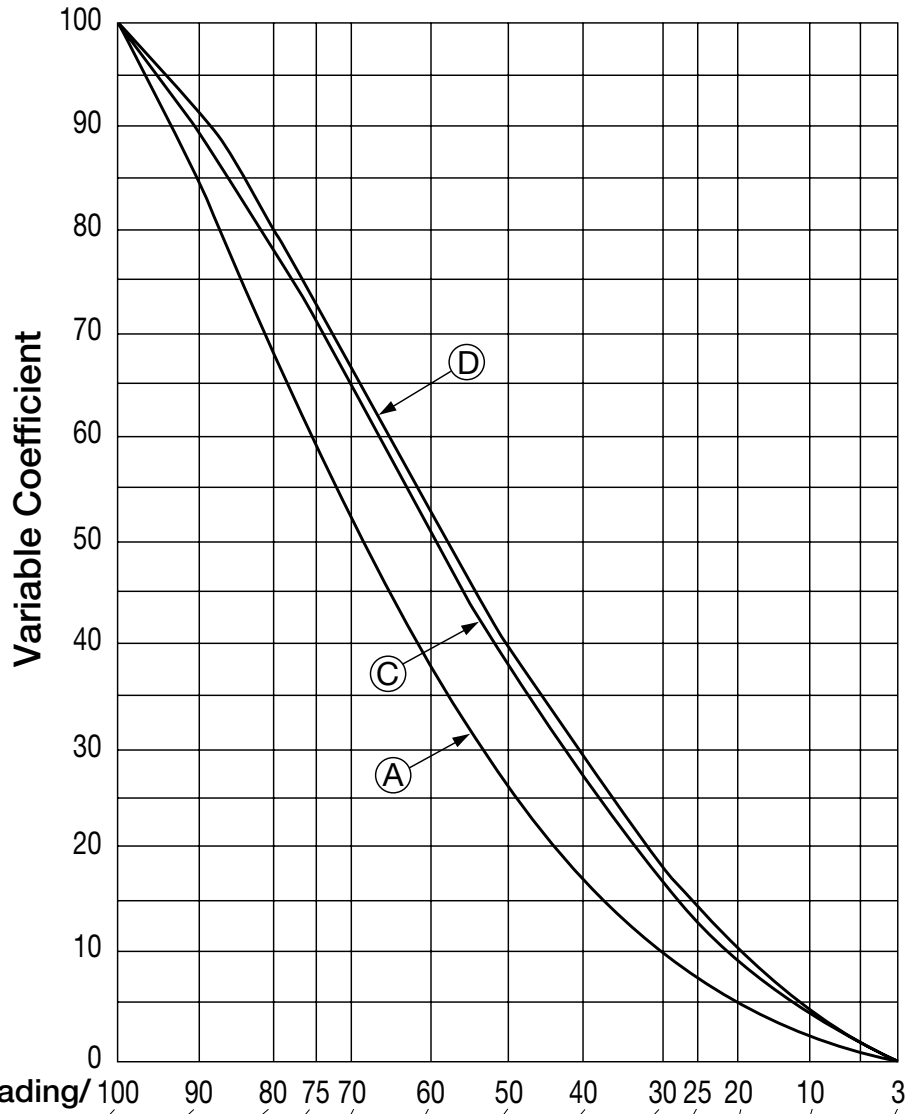
## 16<sup>□</sup> mm Polyvaricon Specification

Specifications		Dimensions (mm)	No. of Stage		max. Capacitance Swing (pF)	min. Capacitance (pF)	Variable Coefficient Curve	Tolerance of Variable Capacitance	Trimmer Capacitance Swing (pF)	Rotational Torque (g·cm)
Uses	Models									
AM/FM	•2LHT16L7	16×16×8	AM	2	(O) 82 (A) 160	(O) 4.3±1 (A) 4.1±1	(O) D (A) A	± (1pF±2%)	5 min.	30~200
			FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.9±1	B	± (0.3pF±2%)		
	•2LHT16B7	16×16×8	AM	2	(O) 82 (A) 160	(O) 4.0±1 (A) 3.8±1	(O) D (A) A	± (1pF±2%)	5 min.	30~200
			FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.6±1	B	± (0.3pF±2%)		
•2LHT16B8	16×16×7.3	AM	2	(O) 82 (A) 160	(O) 3.8±1 (A) 4.5±1	(O) D (A) A	± (1pF±2%)	5 min.	30~200	
		FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.6±1	B	± (0.3pF±2%)			
AM/FM	•2LXT16L7	16×16×8	AM	2	(O) 82 (A) 140	(O) 4.3±1 (A) 4.1±1	C A	± (1pF±2%)	5 min.	30~200
			FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.9±1	B	± (0.3pF±2%)		
	•2LXT16B7	16×16×8	AM	2	(O) 82 (A) 140	(O) 4.0±1 (A) 3.8±1	C A	± (1pF±2%)	5 min.	30~200
			FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.6±1	B	± (0.3pF±2%)		
	•2LXT16B8	16×16×7.3	AM	2	(O) 82 (A) 160	(O) 3.8±1 (A) 4.5±1	C A	± (1pF±2%)	5 min.	30~200
			FM	2	20 (40)	(FC1) 2.8±1 (FC2) 3.6±1	B	± (0.3pF±2%)		

Note : • Standard Type.

# Variable Coefficient Curve

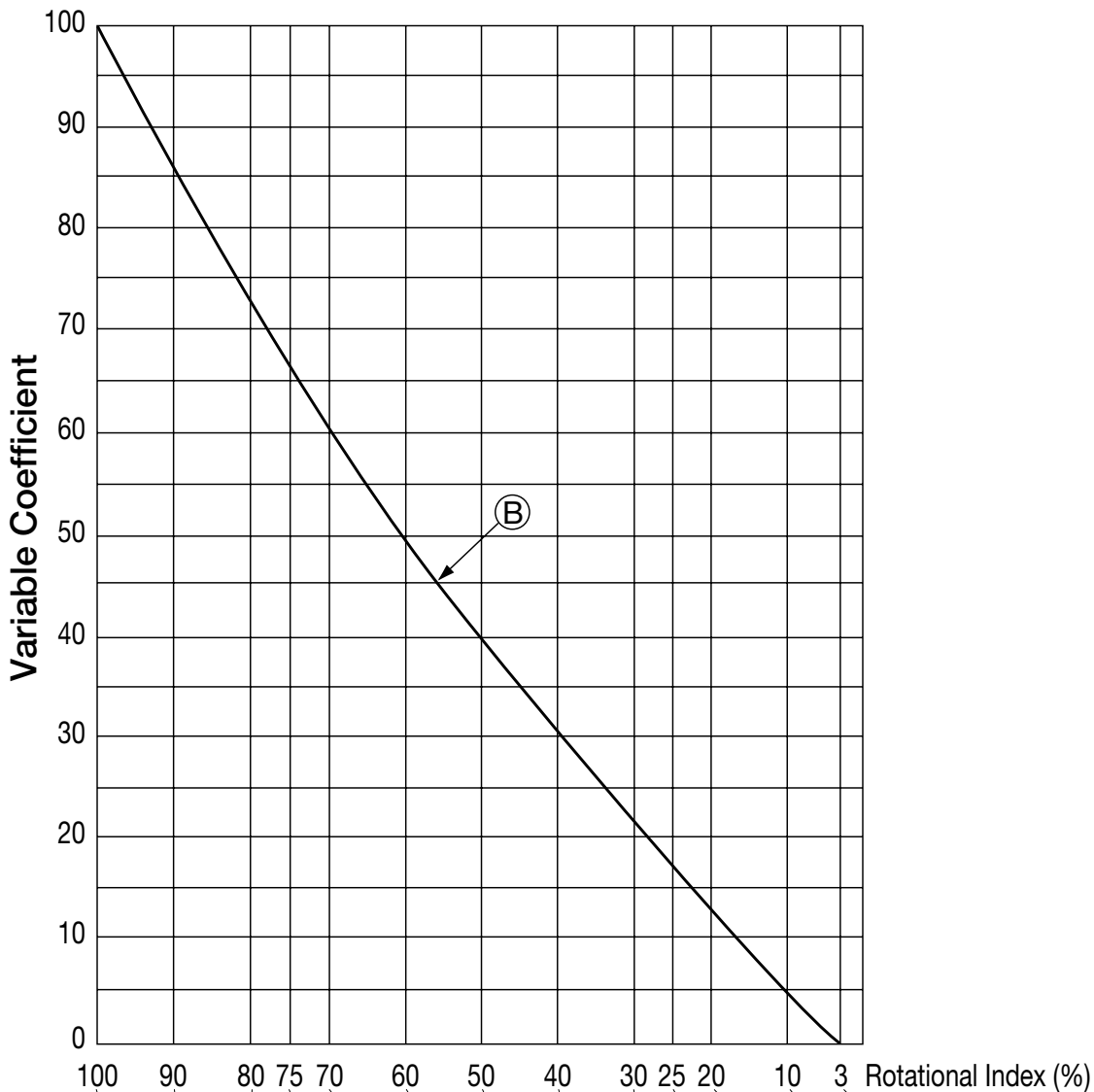
## Variable Coefficient Curve for AM Band



Rotational index(%)	100	90	80	75	70	60	50	40	30	25	20	10	3	Remarks
*A	100.0	84.40	67.90	60.00	52.30	38.00	26.20	17.00	10.20	7.57	5.31	1.74	0	Equivalent to [1a] of EIAJ
*C	100.0	90.00	78.00	71.80	65.20	51.70	38.80	27.20	17.40	13.30	9.60	3.30	0	Equivalent to [1b] of EIAJ
D	100.0	90.20	78.30	72.10	65.50	52.10	39.20	27.60	17.80	13.60	9.82	3.38	0	For WIDE BAND OSC

Note : \*AM standard

Variable Coefficient Curve for FM Band



Rotational index(%)	100	90	80	75	70	60	50	40	30	25	20	10	3	Remarks
Symbol of curve *B	100.0	86.18	73.37	67.32	61.48	50.42	40.12	30.50	21.52	17.25	13.11	5.23	0	Equivalent to [4c] of EIAJ

Note : \*FM standard