Lead Type Disc Medium And High Voltage Ceramic Capacitors-LD Series (Low Loss Type) Data Sheet

Feature

■Wide capacitance range from 220pF to 4700pF.

■Operating Temperature: -25℃～125℃

■Storage Temperature: 15℃~35℃

■Ceramic material has low dielectric loss, thus allowing for reduced heat dissipation.

■Excellent active and passive flame resistant abilities (UL94V-0).

■Y5R&BN is a lead-containing material, but it is exempted by the European Union.

Applications

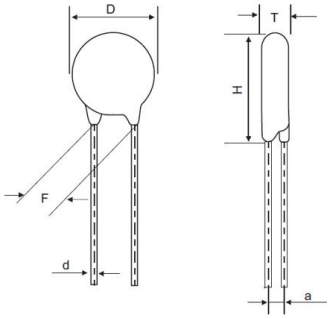
■Suitable for high frequency pulse circuits, such as CTV horizontal resonant circuit and switching power supply snubber circuit.

Part numbering on request.

Specifications

Capacitance and Dissipation factor testing condition	25℃、1±0.1KHz、1.0Vrms
Dissipation Factor(tanδ)	BN: ≤0.5% Y5R: ≤0.2%
Rated Voltage	1000VDC、2000VDC、3150VDC
Withstand Voltage	$1.5U_R$+500V(DC)
Insulation Resistance (I.R.)	C_R≤25nF，≥4000MΩ C_R＞25nF，Rj·CR≥100s
Temperature Characteristic	BN、Y5R

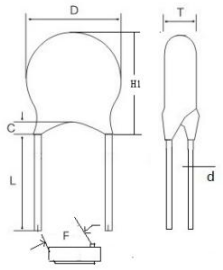
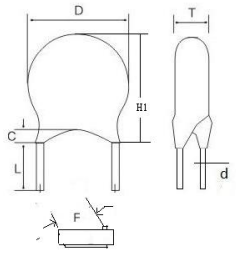
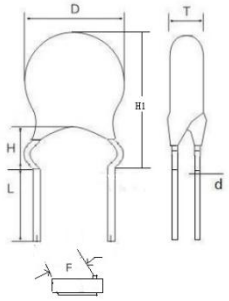
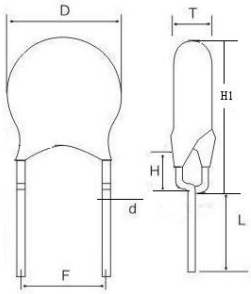
Dimensions (mm)



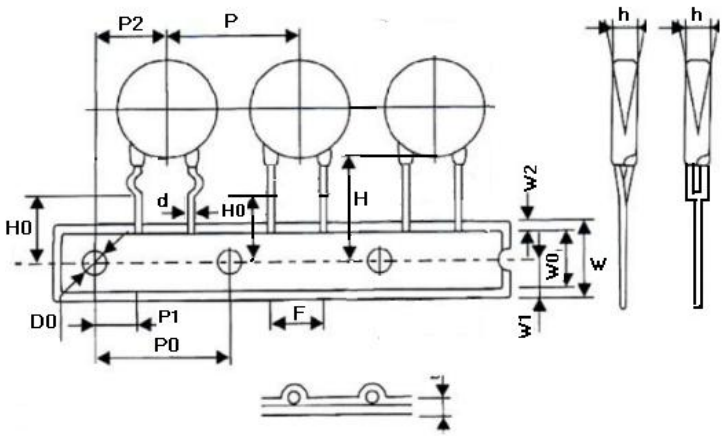
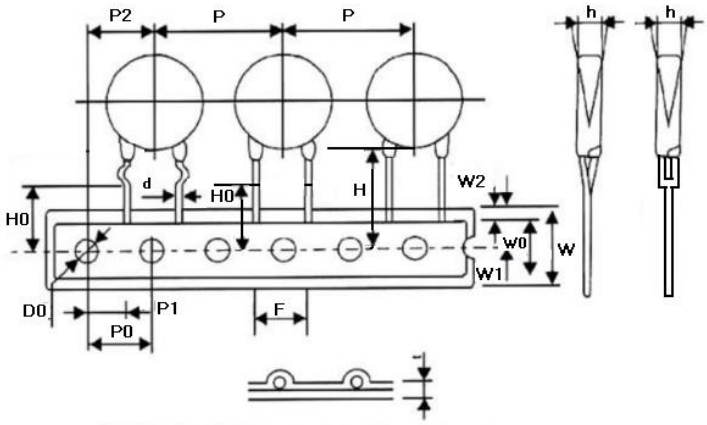
Specification (Y5R series)		Size (mm)				Specification (BN series)		Size (mm)			
		D ±1.0.	T ±1.0.	F±0.8	d±0.05			D ±1.0.	T ±1.0.	F±0.8	d±0.05
1KV	221K	5.5	2.5	5.0	0.5	1KV	471K	5.5	2.5	5.0	0.5
	331K	5.5	2.5	5.0	0.5		681K	5.5	2.5	5.0	0.5
	471K	5.5	2.5	5.0	0.5		102K	6.0	2.5	5.0	0.5
	681K	6.0	2.5	5.0	0.5		152K	6.5	2.5	5.0	0.5
	102K	7.0	2.5	5.0	0.5		222K	8.0	2.5	5.0	0.5
	152K	8.5	2.5	5.0	0.5		332K	11.0	2.5	5.0	0.5
	222K	11.0	2.5	5.0	0.5		472K	13.0	2.5	5.0	0.5
	332K	13.0	2.5	5.0	0.5		/	/	/	/	/
	472K	16.0	2.5	5.0	0.5		/	/	/	/	/
2KV	221K	5.5	3.0	5.0	0.5	2KV	221K	5.5	3.0	5.0	0.5
	271K	6.0	3.0	5.0	0.5		271K	5.5	3.0	5.0	0.5
	331K	6.5	3.0	5.0	0.5		331K	5.5	3.0	5.0	0.5
	391K	6.5	3.0	5.0	0.5		391K	5.5	3.0	5.0	0.5
	471K	7.0	3.0	5.0	0.5		471K	5.5	3.0	5.0	0.5
	561K	8.0	3.0	5.0	0.5		561K	6.0	3.0	5.0	0.5
	681K	8.0	3.0	5.0	0.5		681K	6.5	3.0	5.0	0.5
	821K	9.0	3.0	5.0	0.5		821K	7.0	3.0	5.0	0.5
	102K	9.0	3.0	5.0	0.5		102K	8.0	3.0	5.0	0.5
	122K	10.0	3.0	7.5	0.6		122K	8.0	3.0	7.5	0.6
	152K	11.0	3.0	7.5	0.6		152K	9.0	3.0	7.5	0.6
	182K	12.0	3.0	7.5	0.6		182K	10.0	3.0	7.5	0.6
	222K	13.0	3.0	7.5	0.6		222K	11.0	3.0	7.5	0.6
	272K	14.5	3.0	7.5	0.6		272K	12.0	3.0	7.5	0.6
	332K	16.0	3.0	7.5	0.6		332K	13.0	3.0	7.5	0.6
	392K	17.5	3.0	7.5	0.6		392K	14.5	3.0	7.5	0.6
	472K	19.0	3.0	7.5	0.6		472K	15.0	3.0	7.5	0.6

Specification (Y5R series)		Size (mm)				Specification (BN series)		Size (mm)			
		D ±1.0.	T ±1.0.	F±0.8	d±0.05			D ±1.0.	T ±1.0.	F±0.8	d±0.05
3KV	151K	6.0	3.5	7.5	0.6	3KV	151K	6.0	3.5	7.5	0.6
	181K	6.0	3.5	7.5	0.6		181K	6.0	3.5	7.5	0.6
	221K	7.0	3.5	7.5	0.6		221K	6.0	3.5	7.5	0.6
	271K	7.0	3.5	7.5	0.6		271K	6.0	3.5	7.5	0.6
	331K	8.0	3.5	7.5	0.6		331K	6.5	3.5	7.5	0.6
	391K	8.0	3.5	7.5	0.6		391K	7.0	3.5	7.5	0.6
	471K	9.0	3.5	7.5	0.6		471K	7.0	3.5	7.5	0.6
	561K	9.0	3.5	7.5	0.6		561K	8.0	3.5	7.5	0.6
	681K	10.0	3.5	7.5	0.6		681K	8.0	3.5	7.5	0.6
	821K	11.0	3.5	7.5	0.6		821K	9.0	3.5	7.5	0.6
	102K	12.5	3.5	7.5	0.6		102K	10.0	3.5	7.5	0.6
	122K	13.5	3.5	7.5	0.6		122K	11.0	3.5	7.5	0.6
	152K	14.5	3.5	7.5	0.65		152K	12.0	3.5	7.5	0.6
	182K	16.5	3.5	7.5	0.65		182K	12.0	3.5	7.5	0.6
	222K	17.5	3.5	7.5	0.65		222K	13.0	3.5	7.5	0.6
	272K	19.5	3.5	7.5	0.65		272K	15.0	3.5	7.5	0.65

Lead Configuration

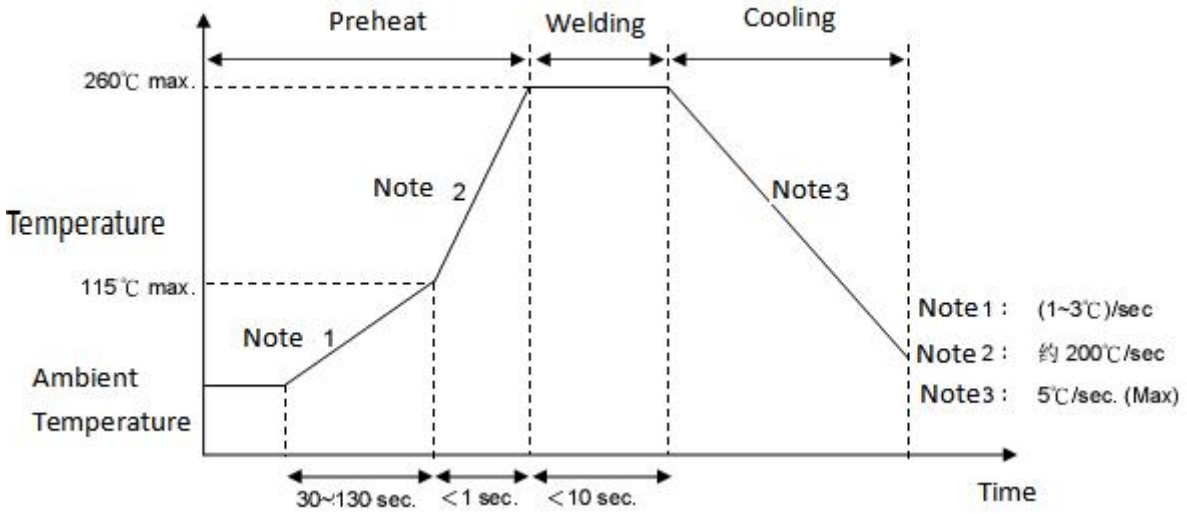
Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length C (mm)
Long Straight		16.0 min	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)
Short Straight		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	①C≤2.5mm (Product diameter < 12mm） ②C≤3.0mm (Product diameter≥12mm)
Outside Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point
Vertical Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0	Not exceed the bend point

Taping And Dimensions (mm)

<table>
<tr><th rowspan="2">Figure</th><th colspan="2">Fig.1</th><th colspan="2">Fig.2</th></tr>
<tr><th>Symbol</th><th>P=5.0</th><th>P=7.5</th></tr>
<tr><td rowspan="8">
</td><td>Po</td><td>12.7±0.3</td><td>12.7±0.3</td></tr>
<tr><td>P</td><td>12.7±1.0</td><td>25.4±1.0</td></tr>
<tr><td>P1</td><td>3.85±0.7</td><td>8.95±0.7</td></tr>
<tr><td>P2</td><td>6.35±1.3</td><td>12.7±1.3</td></tr>
<tr><td>F</td><td>5±0.8</td><td>7.5±0.8</td></tr>
<tr><td>Δh</td><td>0±2.0</td><td>0±2.0</td></tr>
<tr><td>W</td><td>18.0+1.5/-1.0</td><td>18.0 +1.5/-1.0</td></tr>
<tr><td>Wo</td><td>10.5 Max</td><td>10.5 Max</td></tr>
<tr><td>Fig.1 (P=5.0)</td><td>W1</td><td>9.0+0.75/-0.5</td><td>9.0+0.75/-0.5</td></tr>
<tr><td rowspan="7">
</td><td>W2</td><td>3.0 Max</td><td>3.0 Max</td></tr>
<tr><td>Do</td><td>4.0±0.2</td><td>4.0±0.2</td></tr>
<tr><td>H</td><td>20+1.5/-1.0</td><td>20+1.5/-1.0</td></tr>
<tr><td>Ho</td><td>16.5&17.0&19.0 +1.5/-1.0</td><td>16.5&17.0&19.0 +1.5/-1.0</td></tr>
<tr><td rowspan="2">L</td><td>Straight Lead</td><td>Crimped Lead</td><td>Straight Lead</td><td>Crimped Lead</td></tr>
<tr><td>11.0 Max</td><td>9.0 Max</td><td>11.0 Max</td><td>9.0 Max</td></tr>
<tr><td>t1</td><td>0.5±0.2</td><td>0.5±0.2</td></tr>
<tr><td>Fig.2 (P=7.5)</td><td>t2</td><td>1.7 Max</td><td>1.7 Max</td></tr>
</table>

Soldering Condition

Wave Soldering Graph



Iron Soldering Condition

Item	Condition
Temperature of soldering copper bit	350℃（max.）
Soldering duration	3sec（max.）
Space between soldering position and coating layer	2mm（min.）