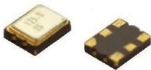


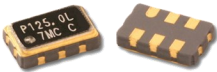

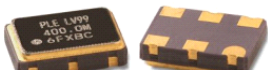
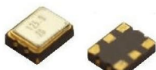
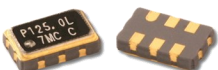



# PLETRONICS

RoHS 6/6 Compliant

Crystal Controlled Oscillators  
**LVDS OUTPUT**

<p><b>LV44J Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>3rd Overtone crystal</li> <li>Low Jitter</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	2.5 x 3.2 x 1.0 mm		<p><b>APPLICATIONS:</b> Ideal reference clocks for high-speed applications requiring low jitter, including:</p> <ul style="list-style-type: none"> <li>10/40/100 Gigabit Ethernet</li> <li>16-32G Fibre Channel</li> <li>100G/400G Optical Transport Networks</li> <li>SONET/SDH linecards.</li> </ul>		
<p><b>LV55J Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>3rd Overtone crystal</li> <li>Low Jitter</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	3.2 x 5.0 x 1.35 mm		<p><b>LV77J Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>3rd Overtone crystal</li> <li>Low Jitter</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	5.0 x 7.0 x 1.7 mm	
<p><b>LV55F &amp; LV55G Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>LV55F is Fundamental crystal</li> <li>LV55G is 3rd Overtone crystal</li> <li>Improved rise and fall times</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	3.2 x 5.0 x 1.35 mm		<p><b>LV77F &amp; LV77G Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>LV77F is Fundamental crystal</li> <li>LV77G is 3rd Overtone crystal</li> <li>Improved rise and fall times</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	5.0 x 7.0 x 1.7 mm	
<p><b>LV99D Series</b> LCC Ceramic Package 3.3 Volt Only  <ul style="list-style-type: none"> <li>Advanced Synthesized design</li> <li>uses a fundamental mode crystal</li> <li>Frequencies from 10MHz to over 600MHz</li> </ul> </p>	5.0 x 7.0 x 1.7 mm		<p><b>LV44F and LV44G Series</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>LV44F is Fundamental crystal</li> <li>LV44G is 3rd Overtone crystal</li> <li>Improved rise and fall times</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	2.5x 3.2 x 1.0 mm	
<p><b>LV55D Series (Standard)</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>3rd Overtone crystal</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	3.2 x 5.0 x 1.35 mm		<p><b>LV77D Series (Standard)</b> LCC Ceramic Package  <ul style="list-style-type: none"> <li>3rd Overtone crystal</li> <li>Enable/Disable function on pad 1</li> </ul> </p>	5.0 x 7.0 x 1.7 mm	

Pletronics Part Series	Crystal Mode	Frequency Range (MHz)	Tr/Tf Maximum (ps)	Duty Cycle %	Typical RMS Jitter (ps)		Current with Load (ma)	Supply Voltage	
					12KHz-20MHz	10Hz-20MHz		2.5V	3.3V
<b>LV44/55/77J</b>	3rd OT	100-175	500	45-55	0.1		60	✓	✓
<b>LV44/55/77F</b>	Fund.	13-110	400	45-55	0.4	1.0	27	✓	✓
<b>LV44/55/77G</b>	3rd OT	35-220	400	45-55	0.4	0.9	40	✓	✓
<b>LV99D</b>	Fund. Synth.	10.9-670	300	47-53	0.6	2.1	90		✓
<b>LV55/77D</b>	3rd OT	80-325	900	45-55	0.4	2.6	66	✓	✓

## FEATURES

- Excellent phase noise characteristics
- Temp range: - 10° to +70°C Standard, -40° to +85°C Extended
- Available Tolerances: +/- 20PPM, +/- 25PPM and +/- 50PPM
- Most common frequencies in stock
- Jitter typical at 156.25 MHz

# PLETRONICS

RoHS 6/6 Compliant

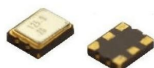
Crystal Controlled Oscillators  
**PECL OUTPUT**

## PE44J Series

LCC Ceramic Package

- ◆ 3rd Overtone crystal
- ◆ Low Jitter
- ◆ Enable/Disable function on pad 1

2.5 x 3.2 x 1.0 mm



**APPLICATIONS:** Ideal reference clocks for high-speed applications requiring low jitter, including:

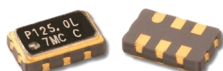
- ◆ 10/40/100 Gigabit Ethernet
- ◆ 16-32G Fibre Channel
- ◆ 100G-400G Optical Transport Networks
- ◆ SONET/SDH linecards

## PE55J Series

LCC Ceramic Package

- ◆ 3rd Overtone crystal
- ◆ Low Jitter
- ◆ Enable/Disable function on pad 1

3.2 x 5.0 x 1.35 mm



## PE77J Series

LCC Ceramic Package

- ◆ 3rd Overtone crystal
- ◆ Low Jitter
- ◆ Enable/Disable function on pad 1

5.0 x 7.0 x 1.7 mm

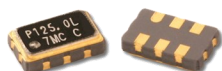


## PE55F & PE55G Series

LCC Ceramic Package

- ◆ PE55F is Fundamental crystal
- ◆ PE55G is 3rd Overtone crystal
- ◆ Improved rise and fall times
- ◆ Enable/Disable function on pad 1

3.2 x 5.0 x 1.35 mm

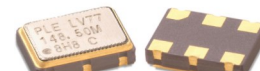


## PE77F & PE77G Series

LCC Ceramic Package

- ◆ PE77F is Fundamental crystal
- ◆ PE77G is 3rd Overtone crystal
- ◆ Improved rise and fall times
- ◆ Enable/Disable function on pad 1

5.0 x 7.0 x 1.7 mm



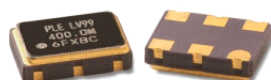
## PE99D Series

LCC Ceramic Package

3.3 Volt Only

- ◆ Advanced Synthesized design
- ◆ uses a fundamental mode crystal
- ◆ Frequencies from 10MHz to over 600MHz

5.0 x 7.0 x 1.7 mm

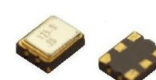


## PE44F and PE44G Series

LCC Ceramic Package

- ◆ PE44F is Fundamental crystal
- ◆ PE44G is 3rd Overtone crystal
- ◆ Improved rise and fall times
- ◆ Enable/Disable function on pad 1

2.5 x 3.2 x 1.0 mm

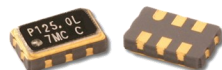


## PE55D Series (Standard)

LCC Ceramic Package

- ◆ 3rd Overtone crystal
- ◆ Enable/Disable function on pad 1

3.2 x 5.0 x 1.35 mm



## PE77D Series (Standard)

LCC Ceramic Package

- ◆ 3rd Overtone crystal
- ◆ Enable/Disable function on pad 1

5.0 x 7.0 x 1.7 mm



Pletronics Part Series	Crystal Mode	Frequency Range (MHz)	Tr/Tf Maximum (pS)	Duty Cycle %	Typical RMS Jitter (pS)		Current with Load (ma)	Supply Voltage	
					12KHz-20MHz	10Hz-20MHz		2.5V	3.3V
<b>PE44/55/77J</b>	3rd OT	100-175	500	45-55	0.1		60	✓	✓
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<b>PE44/55/77G</b>	3rd OT	35-220	400	45-55	0.4	0.9	40	✓	✓
<b>PE99D</b>	Fund. Synth.	10.9-766 876-1,170	300	47-53	0.6	2.1	90		✓
<b>PE55/77D</b>	3rd OT	40-250	700	45-55	0.4	2.6	90	✓	✓

## FEATURES

- ◆ Excellent phase noise characteristics
- ◆ Temp range: - 10° to +70°C Standard, -40° to +85°C Extended
- ◆ Available Tolerances: +/- 20PPM, +/- 25PPM and +/- 50PPM
- ◆ Most common frequencies in stock
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