



**Advanced capacitor portfolio range  
recommended for frequencies below 4 MHz**

# **XtraVolt Vacuum Capacitors**

**High power density in processing modules is a requirement of many RF matchbox designers. With the XtraVolt low frequency Vacuum Capacitor product range, Comet meets these needs with higher voltage capability compared to standard products.**

In high frequency application, current is mostly limited by heat dissipation while in low frequency application current is limited by maximum working voltage. The new XtraVolt low frequency Vacuum Capacitors with higher field strength capability can achieve higher voltage. This enables up to 60% RF power density increase, while keeping the same form factor.

**With the XtraVolt series – recommended for frequencies below 4 MHz – you benefit from increased power density by more than 40% in the same envelope.**

#### **Recommended applications**

- Surface treatment
- Ion beam processing
- Specialized chemical vapor deposition (CVD)

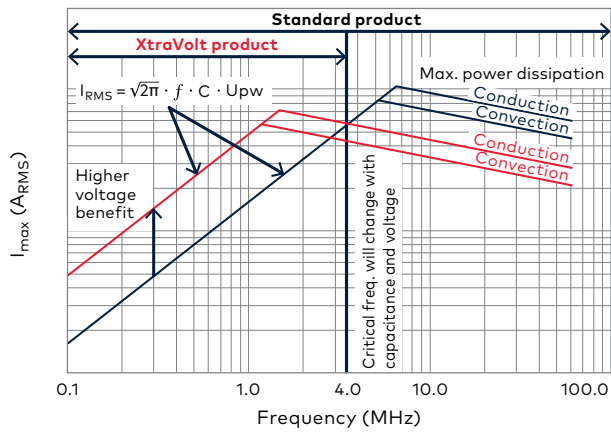
#### **XtraVolt highlights**

- Compact and well-designed RF Impedance Matching Network helps tool builders utilize efficiently the limited space.
- With XtraVolt we optimize space utilization, by offering 20% to 60% increased voltage in the same compact size of our standard Vacuum Capacitor portfolio.
- Increase your RF power density by upgrading your Vacuum Capacitor to XtraVolt.

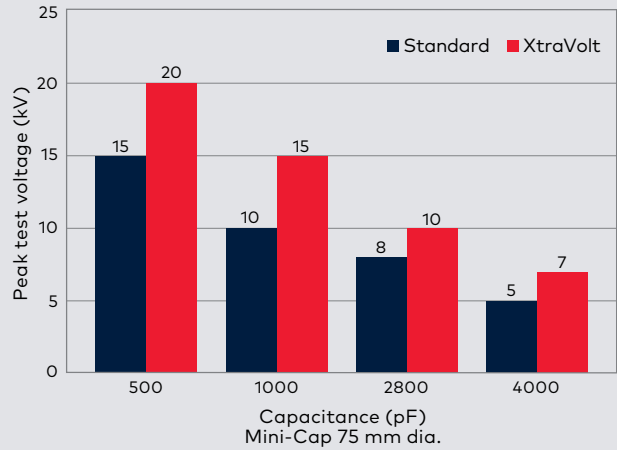


**Led by experience. Driven by curiosity.**

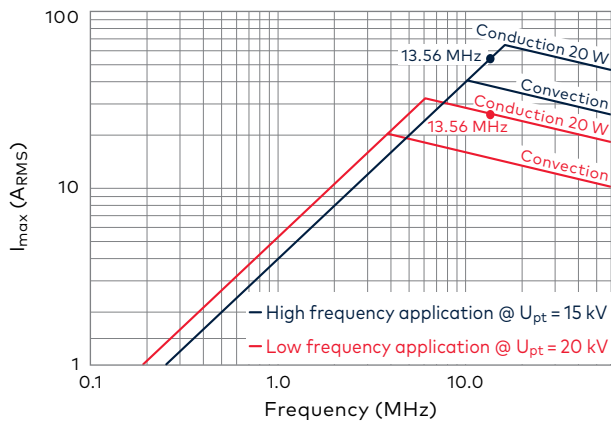
## XtraVolt product range versus standard product range



## Comparison of XtraVolt and standard types for Mini-Cap, Uni-Con and Hexa-Con series



## Current curve of a XtraVolt Mini-Cap



## Comparison of technical features of standard and XtraVolt products

	Mini-Cap Standard CFMN-100CAC/ 15-AF-G	Mini-Cap XtraVolt CFMN-100HAC/ 20-AE-G
Peak test voltage $U_{pt}$	15 $U_{pt}$	20 $U_{pt}$
Max. Current at 2 MHz	8 $A_{RMS}$	11 $A_{RMS}$

## Available series

Fixed, Trimmer and Variable Vacuum Capacitors are available, e.g. Mini-Cap, Mini-Tune, Uni-Con, Hexa-Con and Maxi-Con series. Others on request. We customize for unique applications. For more information, contact your local Comet experts.

### Switzerland (Head Office)

Comet AG  
Flamatt

### China

Comet Mechanical Equipment  
(Shanghai) Co. Ltd., Shanghai

### Germany

Comet Yxlon GmbH  
Aachen

### Japan

Comet Technologies Japan KK  
Yokohama

### Korea

Comet Technologies  
Korea Co., Ltd., Suwon-si

### Malaysia

Comet Technologies  
Malaysia Sdn Bhd, Penang

### Taiwan

Comet Solutions Taiwan Ltd.  
Hsinchu

### United States

Comet Technologies USA, Inc.  
San Jose/CA

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The XtraVolt technology is applicable to most of the existing capacitor series.



Technical information can be found in our Service Bulletins:

[pct.comet.tech/service-bulletins](http://pct.comet.tech/service-bulletins)