

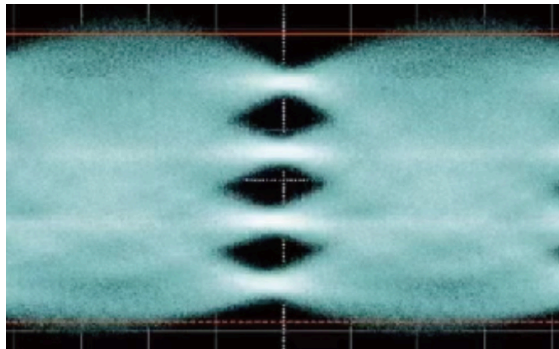
## 106 Gbps PAM4 HCG Few Mode VCSEL

850 nm multimode emission  
 Data rates up to 106-Gbps  
 Up to 15dB Side-Mode Suppression Ratio  
 0.12 nm Super-Narrow RMS Spectral Width  
 6-inch process, high volume and uniformity  
 GR 468 reliability compliant  
 IEEE 802.3db performance compliant  
 Up to 300 m OM3 Fiber Transmission

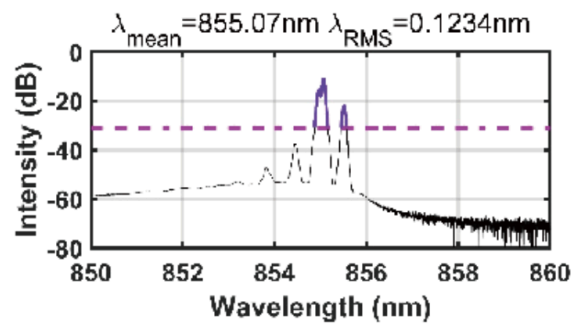
### Applications :

Optical transceiver, active optical cable for AI computing and cloud data center

106 Gbps PAM4 HCG VCSEL Typical Eye diagram



106 Gbps HCG VCSEL Spectrum



1x1 singlet and 1x4 arrays alpha sample



## CHARACTERISTICS

	<b>106 Gbps PAM4 HCG VCSEL</b>
Working Temperature (Module Case Temperature)	<b>(0 – 70 °C)</b>
Modulation Bandwidth	<b>25 GHz</b>
RINOMA	<b>&lt; -139 dB/Hz</b>
Data Transmission Distance	<b>Up to 300 m OM3 Fiber Transmission</b>
Estimated Wear-out Life	<b>&gt; 10 years</b>
Die Dimensions for 1X4 array	<b>980 um (Width) * 265 um (Length) * 150 um (Thickness)</b>

 Notes:

CTR: 0 °C to +70 °C (32 °F to +158 °F)  
ITR: -40 °C to +85 °C (-40 °F to +185 °F)  
ESR: 25 Gbps ESR means 300m data transmission