

| Product Selector           |  |  |  |   |   |  |   |   |   |  |   |                        |                        |                        |                        |
|----------------------------|--|--|--|---|---|--|---|---|---|--|---|------------------------|------------------------|------------------------|------------------------|
| Laser Driver ICs           |  |  |  |   |   |  |   |   |   |  |   |                        |                        |                        |                        |
|                            | <a href="#">iC-HB</a>  | <a href="#">iC-HG</a>  | <a href="#">iC-HK</a>  | <a href="#">iC-HKB</a>  | <a href="#">iC-HT</a>   | <a href="#">iC-NZ</a>  | <a href="#">iC-NZN</a>                      | <a href="#">iC-VJ</a>   | <a href="#">iC-WJB</a>  | <a href="#">iC-WJ</a>  | <a href="#">iC-WK</a>                     | <a href="#">iC-WKN</a> | <a href="#">iC-WKL</a> | <a href="#">iC-WKM</a> | <a href="#">iC-WKP</a> |
| <b>Supply Voltage</b>      | 3.5 to 5.5 V   | 3 to 5.5 V   | 3.5 to 5.5 V   | B: 3 to 5 V (15 V)  | 2.8 to 11 V   | 3.5 to 5.5 V   | 3 to 5.5 V                                  | 5 V   | 2.7 to 6 V  | 5 V  | 2.4 to 6 V                                | 3.6 to 15 V            |                        |                        |                        |
| <b>LD Drive</b>            | 3 x 65 mAdc,<br>3 x 0.3 Apeak  | 6 x 500 mA   | 2 x 150 mAdc,<br>2 x 0.7 Apeak   |   | 2 x 750 mAdc,<br>or 1 x 1500 mA   | 3 x 100 mAdc,<br>3 x 700 mApeak  | 300 mA                                      | 250 mA  | 100 mA  | 250 mA   | 70 mA                                     | 350 mA                 |                        |                        |                        |
| <b>Operation</b>           | CW to 155 MHz<br>(tr/tf 1ns)   | CW to 200 MHz<br>(tr/tf < 1ns)   | CW to 155 MHz<br>(tr/tf 1ns)   |   | CW to 0.2 kHz   | CW to 155 MHz<br>(tr/tf 1.5 ns)  | 1 to 200 kHz                                | CW to 300 kHz   | CW to 300 kHz   |  | CW  | CW                     |                        |                        |                        |
| <b>Adjustable APC</b>      | n/a  | n/a  | n/a  |   | logarithmic configuration   | peak value (4 levels)  | averaging                                   | averaging   | averaging   |  | averaging                                 | averaging              |                        |                        |                        |
| <b>Monitor Current</b>     |  |  |  |   | 2.9 $\mu$ A to 3.5 mA   |  | 50 $\mu$ A to 500 $\mu$ A                   | 150 $\mu$ A to 1.5 mA   | 50 $\mu$ A to 500 $\mu$ A   | 150 $\mu$ A to 1.5 mA  | 10 $\mu$ A to 2.5 mA                      | 2.5 $\mu$ A to 6.2 mA  |                        |                        |                        |
| <b>Protective Circuits</b> |  |  |  |   |   |  |   |   |   |  |   |                        |                        |                        |                        |
| Reverse Polarity           | -  | -  | -  |   | -   | -  | -   | -   | -   | -  | •   | •                      |                        |                        |                        |
| Burst/Transients           | -  | -  | -  |   | •   | •  | •   | •   | •   | •  | •   | •                      |                        |                        |                        |
| Overcurrent                | -  | -  | -  |   | configurable limit  | reset  | -   | -   | -   | -  | •   | •                      |                        |                        |                        |
| Thermal Shutdown           | •  | •  | •  |   | •   | •  | •   | •   | •   | •  | •   | •                      |                        |                        |                        |
| Undervoltage Lockout       | -  | -  | -  |   | •   | •  | •   | •   | •   | •  | -   | -                      |                        |                        |                        |
| <b>LD Pinout</b>           | n/a  | n/a  | n/a  |   | N, M (iC-HT)<br>P (iC-HTP)  | N, M, P  | N, M, P                                     | N, M  | N, M  | N, M (P)   | N, M, P                                   | N<br>M<br>P            |                        |                        |                        |
| <b>OTR °C</b>              | -25..85  | -25..85  | -25..85  |   | -40..85   | -20..90  | -20..85                                     | -25..90   | -25..90   | -25..90  | -40..85                                   | -40..85                |                        |                        |                        |
| <b>Package</b>             | QFN24 4x4  | QFN28 5x5  | SO8Ntp<br>MSOP8tp  |   | QFN28 5x5   | QFN24 4x4  | QFN24 4x4                                   | SO16N   | SO8N  | MSOP8  | SO8N<br>MSOP8                             | SO8N<br>MSOP8          | DFN10 4x4              |                        |                        |
| <b>Special Features</b>    | High-speed spike-free switching, LVDS inputs, current monitor output                           | High-speed spike-free switching, LVDS inputs   | High-speed spike-free switching  |   | SPI/I <sup>2</sup> C interface, pin configurable, monitoring, ACC, APC, standby, safety features  | Safety monitor diode input, single failure proof, self test  | APC or ACC                                  | RC Oscillator, duty cycle 50%, soft-start   | Input watchdog, soft-start  | Input watchdog, soft-start   | Quick start, 1% accuracy, low Rth package |                        |                        |                        |                        |
| <b>Applications</b>        | Laser printers<br>Laser projection, LED drivers, Camera lighting, TOF lighting, LIDAR lighting | Pump lasers, triangulation sensors, displacement sensors, safety light scanners (area-guarding systems, safeguarding access to machines) | Laser data transmission, triangulation sensors, displacement sensors, safety light scanners (area-guarding systems, safeguarding access to machines) | Laser pointer, Pump laser, laser diode modules, embedded laser diode controllers, safety related laser controller | Laser data transmission, barcode readers, triangulation sensors, displacement sensors, safety light scanners (area-guarding systems, safeguarding access to machines) | Laser data transmission, barcode readers, triangulation sensors, displacement sensor, safety light scanners (area-guarding systems, safeguarding access to machines) | Triangulation sensors, displacement sensors | Leveling lasers, laser alignment tools, laser pointers, bar-code readers, triangulation sensors | Leveling lasers, laser alignment tools, laser pointers, bar-code readers, triangulation sensors, displacement sensors, safety light scanners (area-guarding systems, safeguarding access to machines) | Leveling lasers, laser alignment tools, laser pointers, bar-code readers |   |                        |                        |                        |                        |

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[Application Notes for Laser Driver](#)