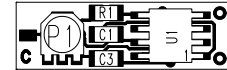


iC-WK BMST WK2D PACKAGE SPECIFICATION

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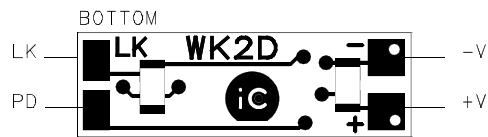
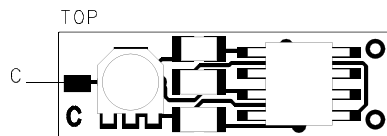
ORDERING INFORMATION

| Type | Package | Options | Order Designation |
|--------|-----------|---------|-------------------|
| iC-WK | BMST WK2D | none | iCSY WK2D |
| iC-WKL | BMST WK2D | none | iCSY WKL2D |



20mm x 6.25mm

PIN CONFIGURATION



PIN FUNCTIONS

| No. | Name | Function |
|-----|------|-----------------------|
| 1 | +V | +5V Supply Voltage |
| 2 | -V | Ground |
| 3 | LK | Laserdiode Kathode |
| 4 | PD | Photodiode |
| 5 | C | Common Pin Laserdiode |

ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Parameter | Conditions | Fig. | Min. | Typ. | Max. | Unit |
|------|--------|--|------------|------|------|------|------|------|
| | | | | | | | | |
| TG1 | Ta | Operating Ambient Temperature Range (extended temperature range on request) | | | 0 | | 50 | °C |
| TG2 | Ts | Storage Temperature Range | | | -20 | | 70 | °C |

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iC-WK BMST WK2D PACKAGE SPECIFICATION

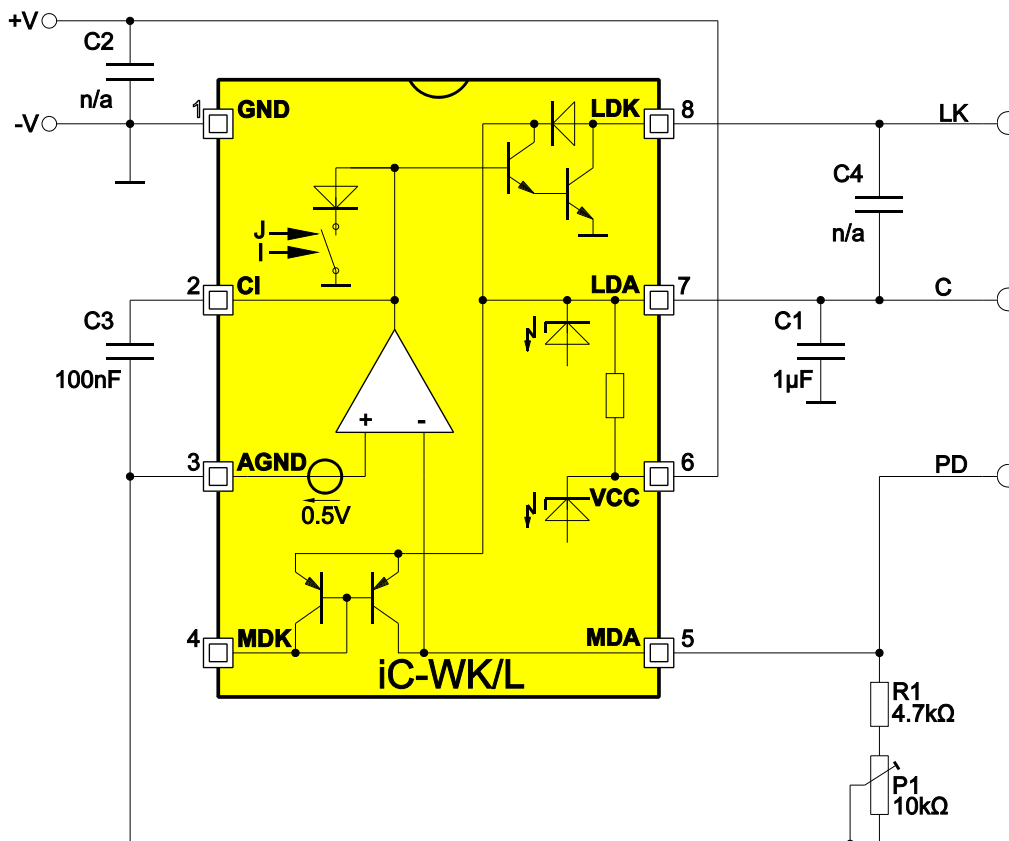
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BASIC ELECTRICAL CHARACTERISTICS

Operating Conditions VCC= 5V ±5%, Tj= -0..50°C, unless otherwise noted

| Item | Symbol | Parameter | Conditions | Tj °C | Fig. | | | | Unit |
|---------------------|--------|----------------------------|--|----------|------|------|------|------|------|
| | | | | | | Min. | Typ. | Max. | |
| Total Device | | | | | | | | | |
| 001 | VDD | Permissible Supply Voltage | | | | 2.4 | | 5.5 | V |
| 002 | I(VDD) | Supply Current in VDD | closed control loop, I(PD)= 0, RM= 200Ω, I(LA)= 70mA | 27 | | | | 5.5 | mA |
| 003 | ton() | Power On Delay | VCC: 0V-5V to 95% I(LD); I(LD)= 70mA, CI= 47nF; I(LD)= 70mA, CI= 100nF | 27 | | | | 70 | μs |
| | | | | | | | | 150 | |

SCHEMATIC DIAGRAM

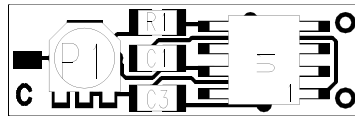


iC-WK BMST WK2D

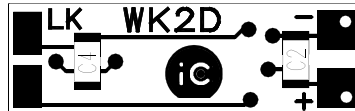
PACKAGE SPECIFICATION

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DEVICE ASSEMBLY



TOP



BOTTOM

dr_a_wk2d_pack_assy

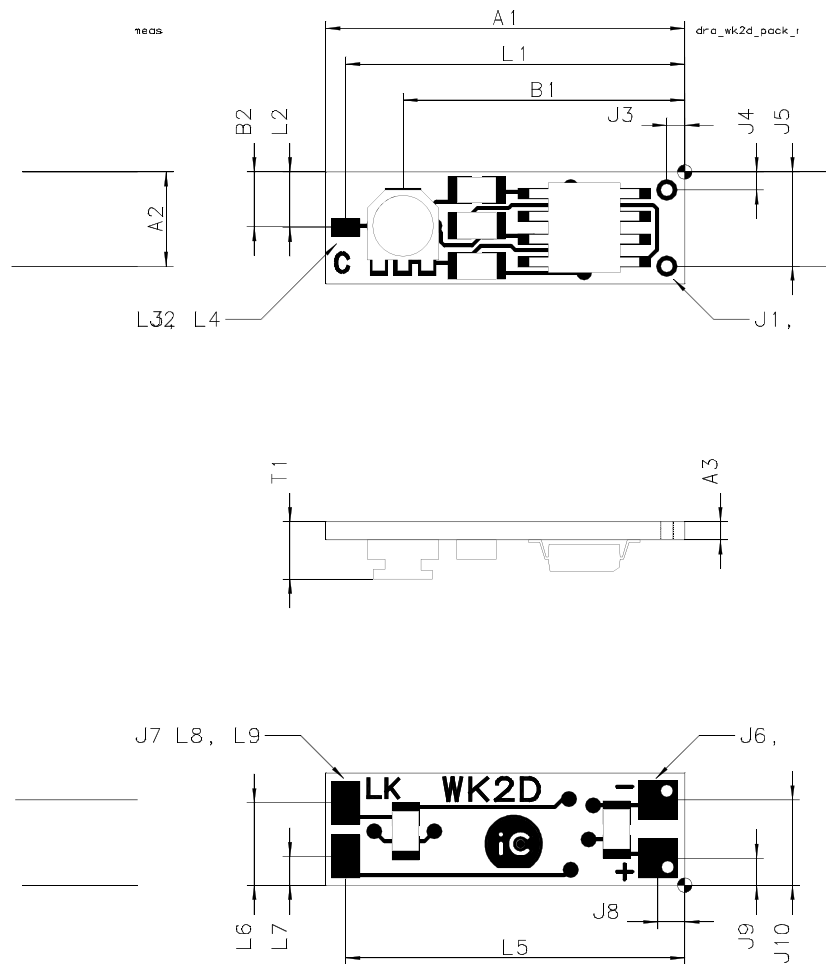
ASSEMBLY PART LIST

| Item | Name | Device | Type/Value | Tolerance | Material | Comments | Package | Place-ment |
|------|------|--------------|------------|-----------|----------|----------|-----------------|------------|
| 01 | U1 | Laser Driver | iC-WK/L | | | | SO8 | TOP |
| 04 | R1 | Resistor | 4.7k | 1% | | | RSMD0805 | TOP |
| 05 | C1 | Capacitor | 1µF | 10% | | | CSMD0805 | TOP |
| 06 | C2 | Capacitor | n. a. | | | | CSMD0805 | BOT |
| 07 | C3 | Capacitor | 100nF | 20% | | | CSMD0805 | TOP |
| 08 | C4 | Capacitor | n. a. | | | | CSMD0805 | BOT |
| 15 | P1 | Trimmer | 10k | 25% | | | meggit Typ 3165 | TOP |

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PHYSICAL DIMENSIONS (given in mm)



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DIMENSION TABLE

| Item | Parameter | Comments | | | | | Unit |
|--------------------------|---|-----------------|------|-------|------|-----------|------|
| | | | Min. | Typ. | Max. | Tolerance | |
| Substrate | | | | | | | |
| A1 | Outline X | | | 20.00 | | ± 0.4 | mm |
| A2 | Outline Y | | | 6.25 | | ± 0.15 | mm |
| A3 | Substrate Thickness (incl CU and Solder Stop) | | 0.9 | | 1.3 | | mm |
| Trimmer Placement | | | | | | | |
| B1 | Trimmer Position vs. Reference X | Axis of Trimmer | | 15.7 | | ± 0.6 | mm |
| B2 | Trimmer Position vs. Reference Y | Axis of Trimmer | | 3.0 | | ± 0.6 | mm |
| Power Connector | | | | | | | |
| J1 | Drill Diameter | | | 0.7 | | -0 / +0.1 | mm |
| J2 | Pad Diameter | | | 1.2 | | ± 0.05 | mm |
| J3 | Drill Position vs. Reference X (-V, +V) | | | 1.0 | | ± 0.3 | mm |
| J4 | Drill Position vs. Reference Y (+V) | | | 1.0 | | ± 0.15 | mm |
| J5 | Drill Position vs. Reference Y (-V) | | | 5.25 | | ± 0.15 | mm |
| J6 | Pad Size X (-V,+V) | | | 2.2 | | ± 0.05 | mm |
| J7 | Pad Size Y (-V,+V) | | | 2.2 | | ± 0.05 | mm |
| J8 | Center Pad vs. Reference X (-V, +V) | | | 1.5 | | ± 0.3 | mm |
| J9 | Center Pad vs. Reference Y (+V) | | | 1.5 | | ± 0.15 | mm |
| J10 | Center Pad vs. Reference Y (-V) | | | 4.75 | | ± 0.15 | mm |
| Laser Connector | | | | | | | |
| L1 | Center Pad vs. Reference X (Common Pin) | | | 18.8 | | ± 0.3 | mm |
| L2 | Center Pad vs. Reference Y (Common Pin) | | | 3.1 | | ± 0.15 | mm |
| L3 | Pad Size X (Common Pin) | | | 1.6 | | ± 0.05 | mm |
| L4 | Pad Size Y (Common Pin) | | | 1.0 | | ± 0.05 | mm |
| L5 | Center Pad vs. Reference X (LA, PD) | | | 18.8 | | ± 0.3 | mm |
| L6 | Center Pad vs. Reference Y (LA) | | | 4.6 | | ± 0.15 | mm |
| L7 | Center Pad vs. Reference Y (PD) | | | 1.6 | | ± 0.15 | mm |
| L8 | Pad Size X (LA, PD) | | | 1.6 | | ± 0.05 | mm |
| L9 | Pad Size Y (LA, PH) | | | 2.4 | | ± 0.05 | mm |
| Thickness | | | | | | | |
| T1 | Overall Thickness | | 3.1 | | | | mm |

iC-WK BMST WK2D PACKAGE SPECIFICATION

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REVISION HISTORY

| Rev | Notes | Pages affected |
|-----|---|----------------|
| A0 | Initial version | all |
| A1 | iC-WKL added | 1-3 |
| B1 | Substrate Thickness A3 Max. value changed from 1.1 to 1.3 | 5 |

GENERAL HANDLING INSTRUCTIONS

Board micro system modules are not subject to dry pack delivery and are not intended for reflow soldering.

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