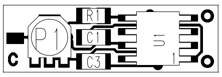
iC-WK BMST WK2D
PACKAGE SPECIFICATION

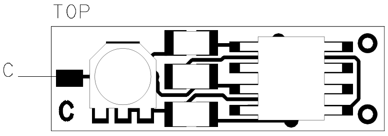
ORDERING INFORMATION

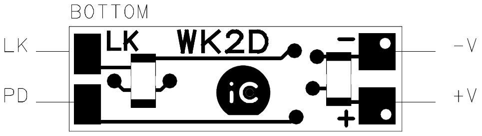
Type	Package	Options	Order Designation
iC-WK	BMST WK2D	none	iCSY WK2D
iC-WKL	BMST WK2D	none	iCSY WKL2D



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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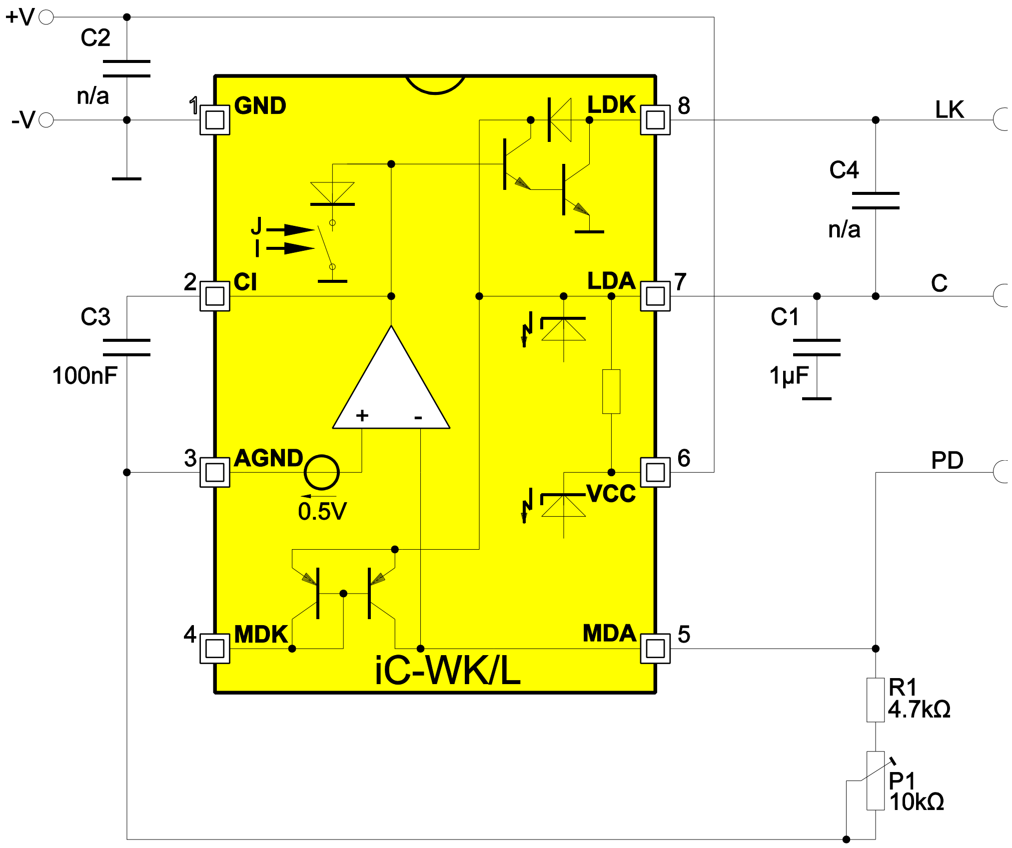
BASIC ELECTRICAL CHARACTERISTICS

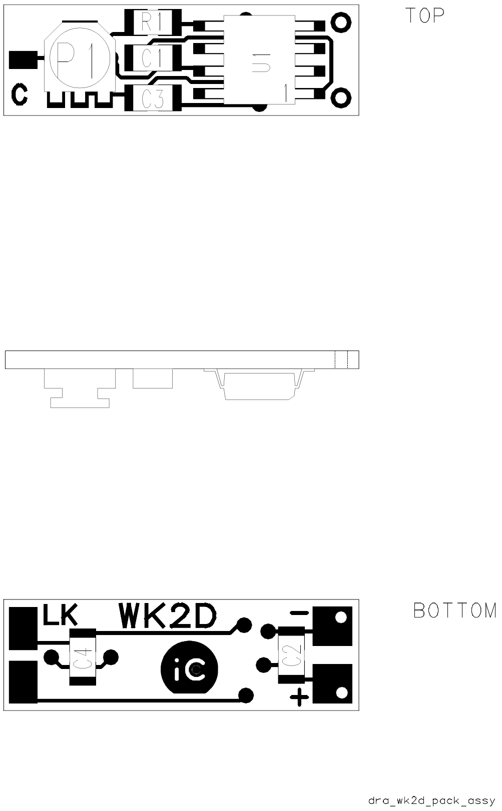
Operating Conditions VCC= 5V ±5%, Tj= -0..50°C, unless otherwise noted

Item	Symbol	Parameter	Conditions	Tj °C	Fig.	Min.	Typ.	Max.	Unit
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				 70 150	 μs μs

SCHEMATIC DIAGRAM



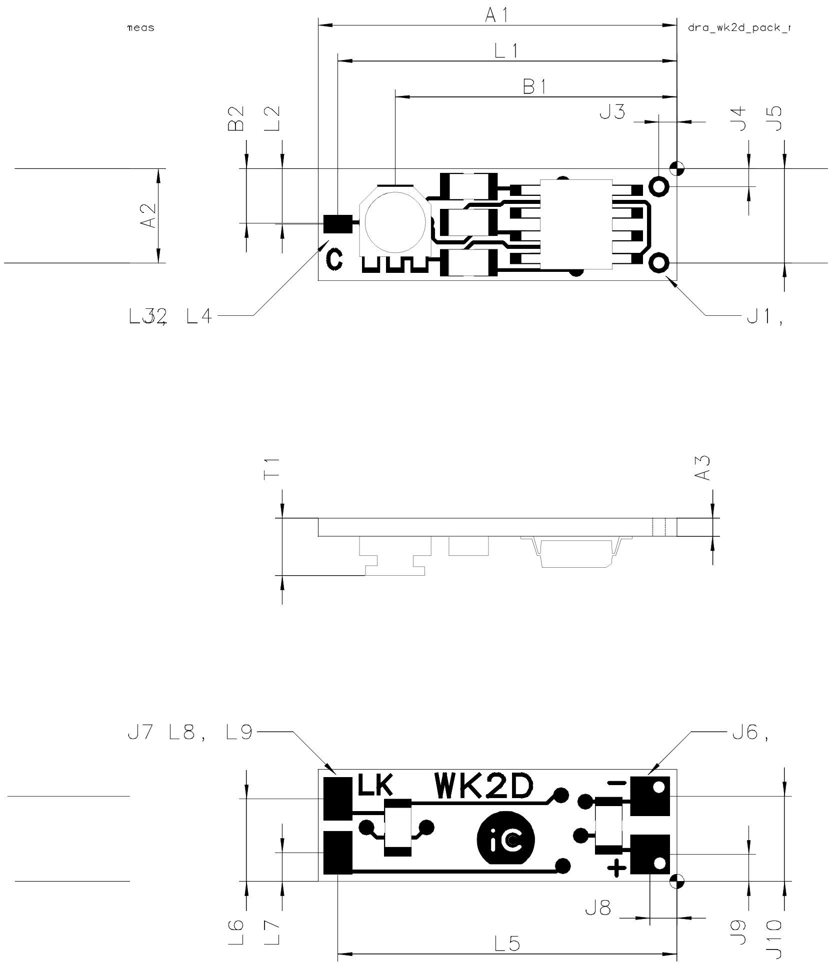
DEVICE ASSEMBLY



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

PHYSICAL DIMENSIONS (given in mm)



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DIMENSION TABLE

Item	Parameter	Comments	Min.	Typ.	Max.	Tolerance	Unit
	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	
J10	Center Pad vs. Reference Y (-V)			4.75		± 0.15	
	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

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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.