

BIAS VOLTAGE (Vb+ AND Vb-) TABLE*

DETECTOR SIZE	PbSe CHEMISTRY	
2mm x 2mm	Vb+ = 50V	Vb- = 0V

*RECOMMENDED FOR BEST PERFORMANCE

SPECIFICATION TABLE

SPECIFICATION	MIN	TYP	MAX
DETECTOR SIZE		2 x 2mm	
DETECTOR LOAD RESISTOR		1MΩ	
GAIN		10	
INPUT TIME CONSTANT		150ms	
RADIATION INTENSITY: PbSe	10 ⁻⁸ W/cm ²		10 ⁻³ W/cm ²
SOURCE MODULATION FREQUENCY	10Hz	100Hz, 500Hz	825Hz
Vb+ - Vb- PbSe		50-70VDC	100VDC
THERMISTOR (25°C)(10uV-100uV INPUT)		10KΩ	
TEC VOLTAGE			2.4-3VDC
TEC CURRENT			1.3A
OPERATING TEMPERATURE	-20°C		+65°C
OP AMP SUPPLY VOLTAGE +Vcc,-Vcc		±15V	±20V
OP AMP SUPPLY CURRENT		2pA	20pA
OUTPUT TO INSTRUMENT Vo		10-1000uV	

Vo=0-1000uVAC OUTPUT TO INSTRUMENT

(BAND PASS TO MATCH SOURCE MODULATION FREQUENCY)

PIN FUNCTION TABLE

PIN NO.	FUNCTION	COLOR
1	TE COOLER (-)	BLACK
2	NC	
3	CASE	WHITE
4	TE COOLER (+)	RED
5	Vo	BLUE
6	GND	GREEN
7	Vb-	BLACK
8	NC	
9	THERMISTOR	YELLOW
10	NC	
11	NC	
12	THERMISTOR	YELLOW
13	NC	
14	Vb+	BROWN
15	-Vcc	BLACK
16	+Vcc	RED

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION} _{-0.00} MAX.= ^{+0.00} _{-DECIMAL PRECISION}



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
FAX: +1.847.359.6538
WEB: WWW.LUMEX.COM

INTEGRATED DETECTOR ASSEMBLY

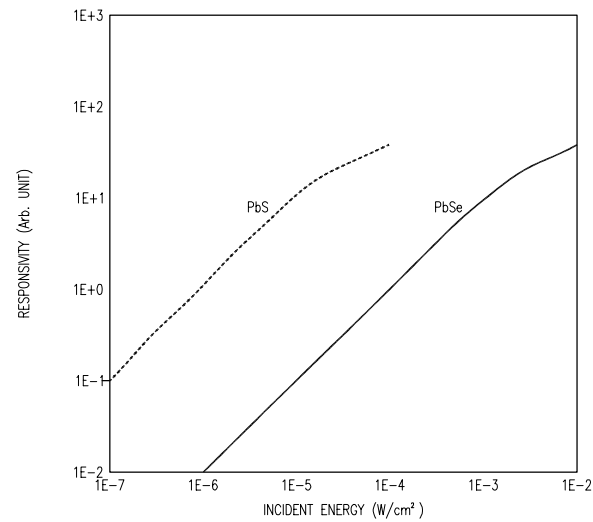
THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

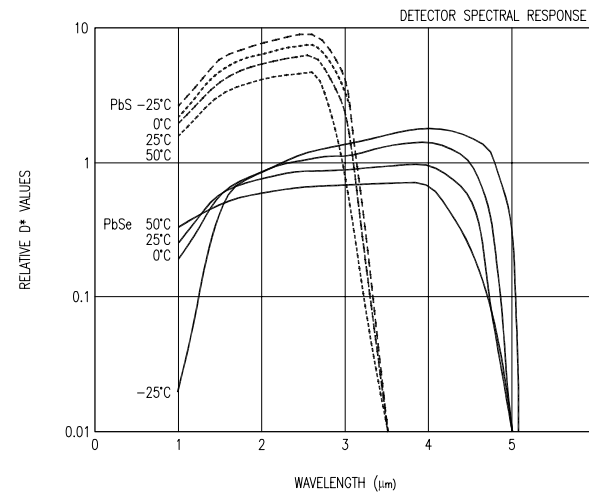
DATE:	02.09.11	DRAWN BY:	AB
PAGE:	1 OF 2	CHKD BY:	KF
SCALE:	NTS	APRVD BY:	BC
UNIT:	mm [INCH]		



RESPONSIVITY vs. INCIDENT ENERGY



DETECTIVITY vs. WAVELENGTH



*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= ^{+DECIMAL PRECISION} -0.00 MAX.= ^{+0.00} -DECIMAL PRECISION



290 E. HELEN ROAD
 PALATINE, IL 60067-6976
 PHONE: +1.847.359.2790
 FAX: +1.847.359.6538
 WEB: WWW.LUMEX.COM

INTEGRATED DETECTOR ASSEMBLY

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

CONFIDENTIAL INFORMATION
 THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

DATE:	02.09.11	DRAWN BY:	AB
PAGE:	2 OF 2	CHKD BY:	BC
SCALE:	NTS	APRVD BY:	KF
UNIT:	mm [INCH]		Ⓟ