

Features

- ⊕ Small and Light Weight
- ⊕ 1/3" Inter-line type Monochrome CCD
- ⊕ EIA standard, CCIR version available
- ⊕ Backlight Compensation
- ⊕ CCD Iris
- ⊕ Reverse Scan (Mirror) selectable
- ⊕ Environmentally Sealed Housing
- ⊕ Sapphire Window with EMI Protection

General Description

The RBC-MD2EX.X camera is a very rugged and compact monochrome CCD video camera (X.X = lens focal length, see below). The camera is well protected inside an environmentally sealed aluminum housing, finished in Lusterless Desert Tan and with a scratch resistant sapphire window. The housing provides complete EMI protection, and can "breathe" through a humidity filter, minimizing maintenance requirements during long term storage.


Environmental Specifications

Storage Temperature	46° to +71°
Operating Temperature	-40° to +60°
Altitude (Norm.Operational)*	Sea Level to 50,000 ft.+
Altitude (Non-Operational)*	-15,000 ft. to 60,000 ft.+
Explosive Atmosphere	Sea Level to 50,000 ft. +
Storage Humidity	95% (50°C) to 85% (38°C)
Operating Humidity	5% to 100% relative humidity (condensing)
Vibration (Operational)	MIL-STD 810C, 514.2 (VIII), 70 hrs
Shock (Operational)	MIL-STD 810C, 516.2 (I), 30g, 3 dir
EMI	MIL-STD-461, Radiated RS02, RS03, 50V/m RE02

*Estimates based on similar products, which have been tested

Specifications

Image Sensor	1/3" Inter-line type Monochrome CCD Sensor
Effec. Picture Elements	752 H x 582 V (PAL) 768 H x 494 V (NTSC)
Signal System	EIA (CCIR version available)
Video Output	1.0Vpp, 75 ohms
Scanning System	2 : 1 Interlace
Synchronization System	Internal
Horizontal Resolution	500 TV Lines
Min. Illumination	0.2 Lux (50 IRE, AGC ON, F1.4)
S/N Ratio	48dB or greater
Gamma Correction	$\gamma = 0.45$
AGC	On/Off (0 dB to +18 dB)
Electronic Iris - Off/On	1/60 (1/50) to 1/120,000 sec.
Power Supply Voltage	10.8-13.2VDC
Power Consumption	90ma (@12VDC)
Connector	MIL-38999, Ser III
Weight	396 g (14 oz)
Dimensions	73.91 mm (H) 60.96 mm (W) 69.09 mm (D)
Optional Lenses (X.X)	FL2.3mm Hfov=114.4°
(all lenses fixed iris, f=2.8)	FL4.0mm Hfov=67.7°
	FL5.6mm Hfov=46.5°
	FL8.0mm Hfov=31.6°
	FL16.0mm Hfov=15.3°
	FL25.0mm Hfov=9.6°

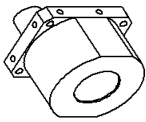
Versions

RBC-MD2E/X.X	NTSC, X.X =Lens FL
RBC-MD2PE/X.X	PAL, X.X=Lens FL

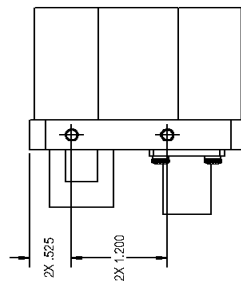
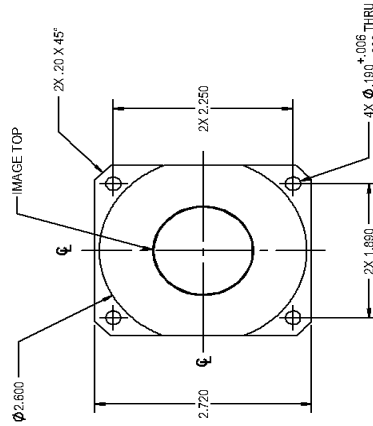
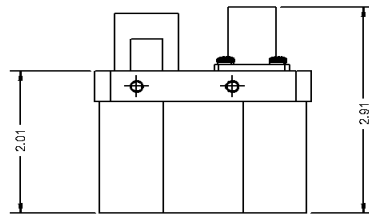
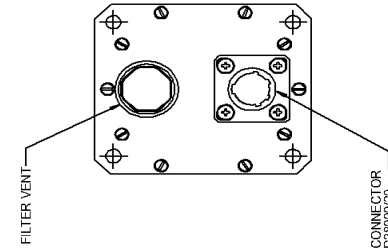
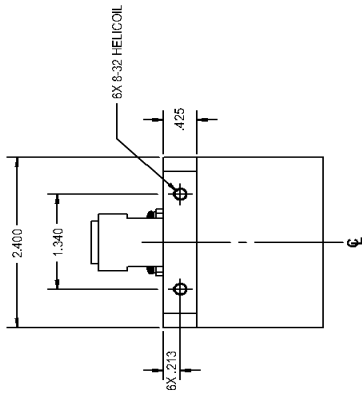
Specifications are subject to change without notice.

21 September, 2011

REV	BY	DESCRIPTION	DATE	APPROVED
A	JC	RELEASED FOR TECHNICAL INFORMATION	11/05/07	FH
B	JC	INCREASED WIDTH TO 2.400	11/19/07	FH
C	JC	ADDED FC/EMA CALIBRATION PARTNER		



ISOMETRIC VIEW
SCALE 1:2



CONNECTOR PINOUT

PIN NO.	SIGNAL TYPE
1	GND (12VDC RETURN)
2	12VDC
3	VIDEO GND (SHIELD)
4	VIDEO
5	REVERSE ON (MIRRORED)
6	N/C

NOTICE
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NOTE: UNLESS OTHERWISE SPECIFIED

ITEM	QTY	DASH NO.	DESCRIPTION	LIST OF MATERIALS	MATL.	FINISH
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DO NOT MANUALLY UPDATE CAD DRAWING.						
TOLERANCES ARE:						
X = ±.030						
XX = ±.015						
XXX = ±.006						
ANGLES = ±1°						
DO NOT SCALE DRAWING						
FINISH						
HEAT TREAT						
REVISION						
DATE						
BY						
CHECKED						
APPROVED						
SEKAI ELECTRONICS			TOP ASSEMBLY, RBC-D2E AND RBC-MD2E			
DRAWN BY: J. CARILLO			DWG. NO.: 98RBCD2E-01			
CHECKED BY: J. CARILLO			REV: B			
DATE: 11/05/07			SCALE: 1:1			
SHEET: 1 OF 1						