

LJ640U23

Series LJ640U23 LJ640U24 LJ640U25 LJ640U30

Features

- **Display format:** 640 (W) × 200 (H) dots
- **Dot pitch ratio:**
 - 1:1 ... LJ640U25 1:1.4 ... LJ640U23
 - 1:1.6 ... LJ640U30 1:2 ... LJ640U24
- **Input signal level:** LS TTL level
- **Drive method:** P-P symmetric drive
- **Structure:** Al frame (LJ640U23/24/30)
Baseplate (LJ640U25)
- **Net weight:** Approx. 600g (LJ640U25)
Approx. 650g (LJ640U23/30)
Approx. 750g (LJ640U24)
- **LJ640U80:** Extended temperature type
is also available.
(Dot pitch ratio 1:1)
- **LJ640U21:** Al frame type is also available.
(Dot pitch ratio 1:1, +5V, +15V)

Absolute maximum ratings

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Interface signal (Logic "H")	V _{IH}	5.5	V
Interface signal (Logic "L")	V _{IL}	-0.5	V
Supply voltage (Logic)	V _L	7	V
Supply voltage (Panel drive)	V ₀	18(14)	V
Operating temperature	T _{opr}	0(-5) to +55	°C
Storage temperature	T _{stg}	-25 to +70	°C

Note) (): LJ640U25

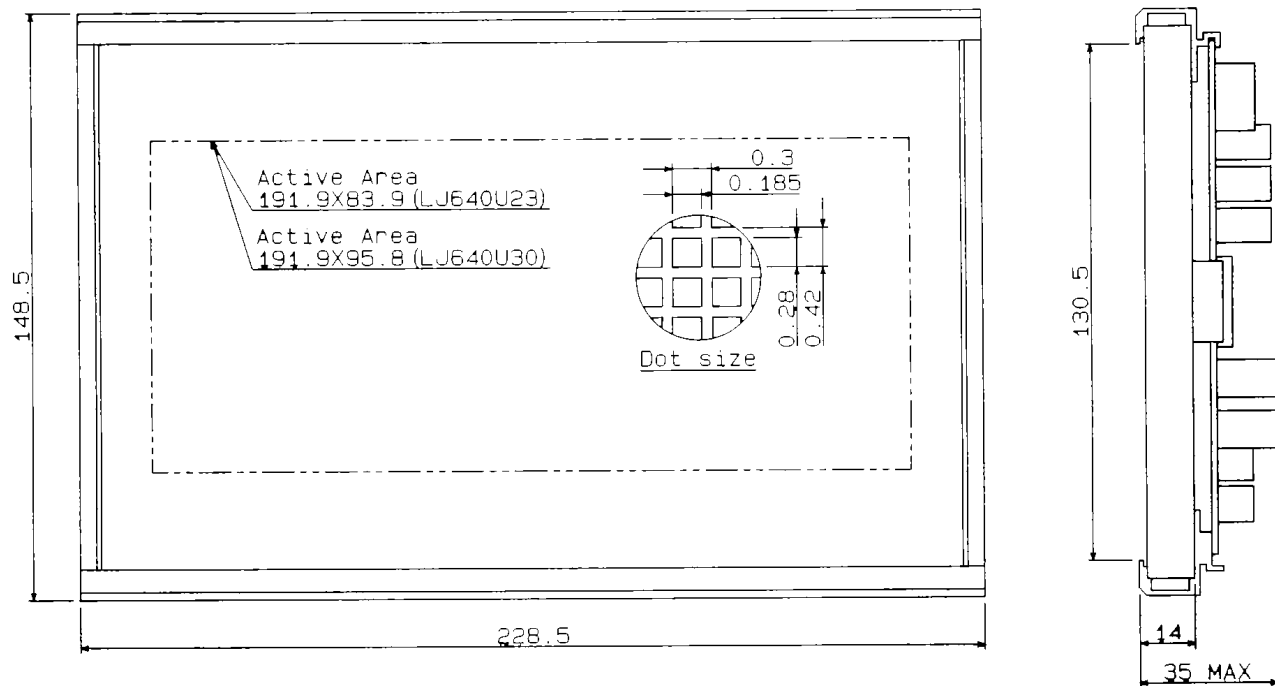
Corresponding connector:

HIF3BA-16D-2.54R (HIROSE) or equivalents

Outline Dimensions

(Unit:mm)

LJ640U23/LJ640U30



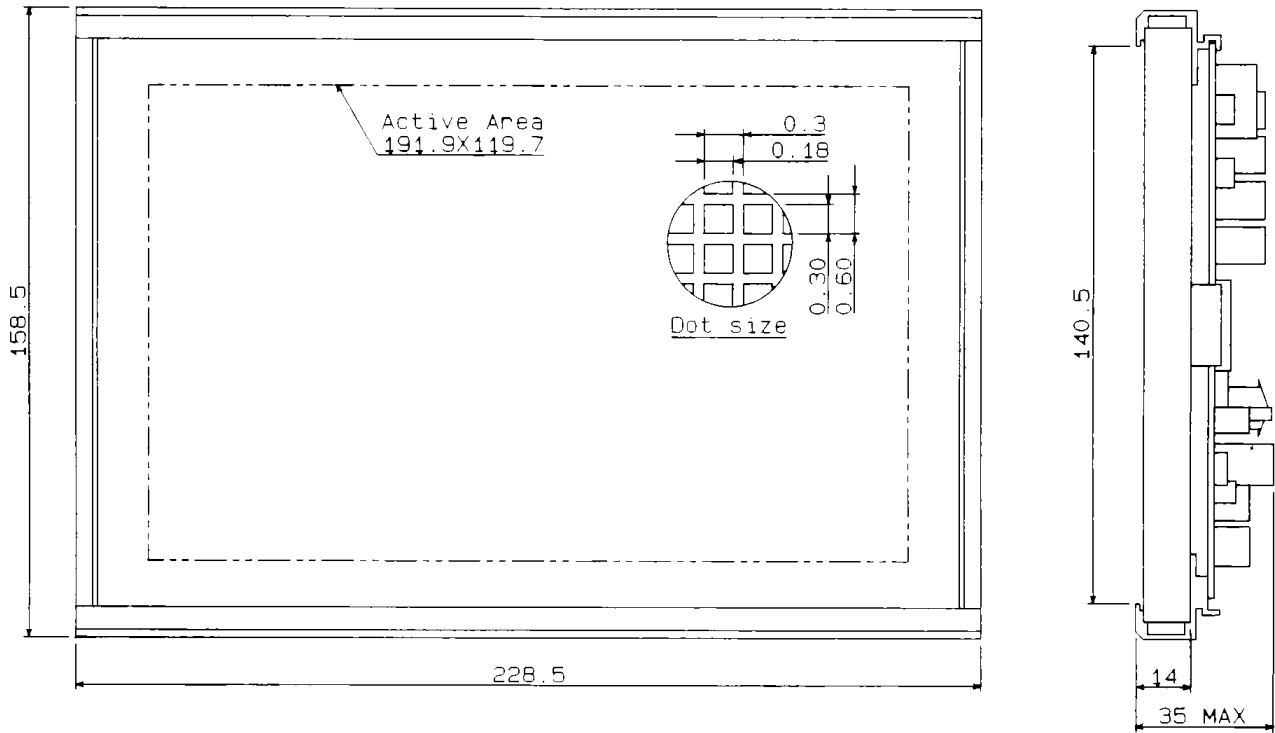
Connector
HIF3FB-16PA-2.54DS (HIROSE ELECTRIC) or equivalents.

LJ640U23/LJ640U24/LJ640U25/LJ640U30

Outline Dimensions

(Unit:mm)

LJ640U24



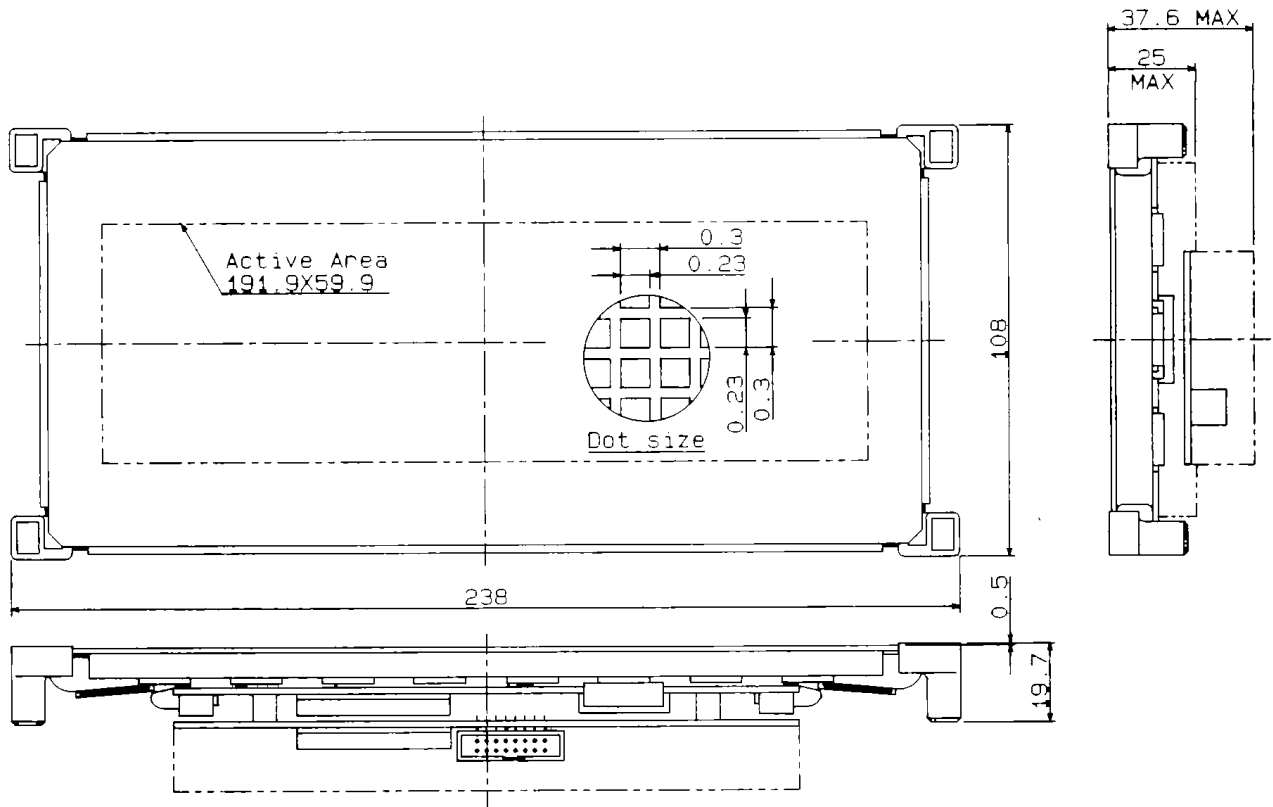
Connector
HIF3FB-16PA-2.54DS (HIROSE ELECTRIC) or equivalents.

LJ640U23/LJ640U24/LJ640U25/LJ640U30

Outline Dimensions

(Unit: mm)

LJ640U25



Connector
HIF3FB-16PA-2.54DS (HIROSE ELECTRIC) or equivalents.

LJ640U23/LJ640U24/LJ640U25/LJ640U30

Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply voltage (Logic)	V _L	—	4.75	5.0	5.25	V
Supply current (Logic)	I _L	V _L =5V	100	—	450(500)	mA
Supply voltage (Panel drive)	V _D	—	14.25 (11.4)	15.0 (12.0)	15.75 (12.6)	V
Supply current (Panel drive)	I _D	V _D =15V(12V)	50(100)	—	750(800)	mA
Power consumption	P _T	V _L =5V, V _D =15V(12V)	—	10	—	W
Luminance	B _{ON}	All dots lit	20(23)	30(34)	—	fL
Off luminance	B _{OFF}	All dots turned off	—	—	1.0	fL
Luminance distribution	ΔB _{DMS}	All dots lit	—	—	35	%

Note () : LJ640U25
{ } : LJ640U24

Interface Signals

Pin No.	Symbol	Description
A-1	D _{IN}	Data signal
B-1	GND	Ground
A-2	CKD	Data transfer clock
B-2	GND	Ground
A-3	H.D	Horizontal sync. signal
B-3	GND	Ground
A-4	V.D	Vertical sync. signal
B-4	GND	Ground
A-5	GND	Ground
B-5	GND	Ground
A-6	GND	Ground
B-6	GND	Ground
A-7	V _L	+5V
B-7	V _L	+5V
A-8	V _D	+15V(+12V*)
B-8	V _D	+15V(+12V*)

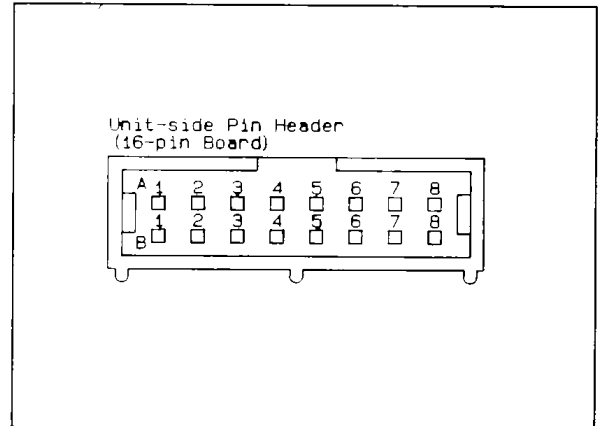
*LJ640U25:12V

Interface Timing Ratings

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Clock frequency	1/T _{CL}	8.8	—	16	MHz
Clock duty	T _{CL(H) / T_{CL} × 100}	45	—	55	%
Horizontal sync. signal cycle time	T _H	60	—	75	μsec
Horizontal sync. signal blanking time	t _{HB}	2	—	—	μsec
Vertical sync. signal blanking time	t _{VB}	1	—	N × T _H	μsec
Vertical sync. signal valid time	t _{VA}	200 × T _H	—	—	μsec
Frame frequency	1/T _V	50	60	64	Hz
Data signal delay time required	t _{DD}	0.01	—	T _{CL}	μsec
Horizontal sync. signal delay time required	t _{HD}	0.01	—	T _{CL} /2	μsec
Vertical sync. signal rise wait time	t _{VR}	4 × 60	—	—	μsec
Vertical sync. rise timing	t _{VH}	60	—	T _H - t _{HB} + 50	μsec

Connector



Interface Timing Chart

