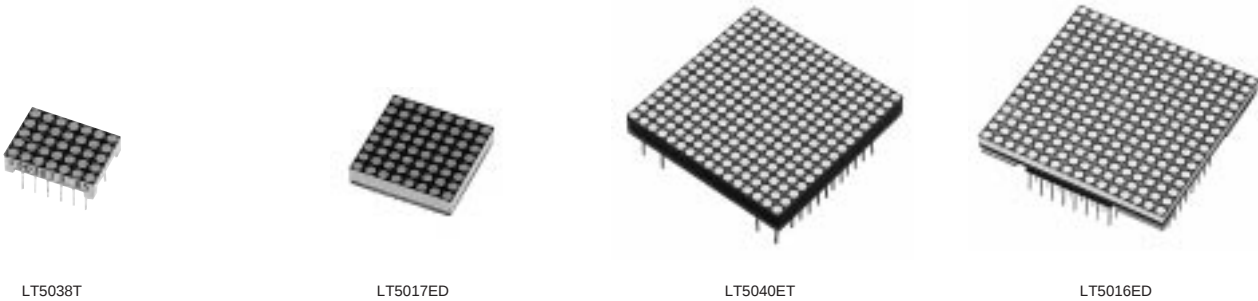


Dot Matrix LED

[查询"LT5005D"供应商](#)

General Description

Sharp's dot matrix LEDs can express characters and symbols on a display.
(Number of dots: 5×7, 8×8, 16×16). We can supply wide color variation;
high-luminosity red T series, yellow-green E series, sunset orange S series,
dichromatic emission, etc.



Dot Matrix LED

Number of dots	Outline dimensions (mm)	Common pins	Radiation color						Outline dimensions	
			T Red (High-luminosity)	D Red	S Sunset orange	E Yellow-green	E T Yellow-green+ Red (High-luminosity)	E D Yellow+ Red	Page	Figure
5×7	12.7×17.8	K	LT5038T						→	1
		A	LT5037T							
8×8	20×20	K						LT5017ED		2
		K						LT5027ED		3
	30.2×30.2	A	LT5010T	LT5010D					→	4
		K		LT5105D		LT5105E				
	31.8×31.8	A		LT5106D	LT5106S	LT5106E			→	5
		K						LT5007ED		5/6
16×16	31.9×31.9	A	LT5013T					LT5008ED		7
		A		LT5014D	LT5014S	LT5014E			→	8
		A					LT5040ET			9
	40×40	K		LT5005D	LT5005S	LT5005E				10
		A	LT5005T							11
	64×64	A					LT5050ET			12
		A						LT5016ED		
		A						LT5026ED		

*1 Common pins show row.(Column row)

Dot Matrix LED

[查询"LT5005D"供应商](#)

■ Absolute Maximum Ratings Figures shown below are values per dot.

(Ta=25°C)

Number of dots	Outline dimensions (mm)	Radiation color	Model No.		Forward current	Peak forward current	Derating factor	Reverse voltage	Operating temperature	Storage temperature
			Anode common*1	Cathode common*1	I _F (mA)	I _{FM} (mA)	(mA/°C) Pulse	V _R (V)	T _{opr.} (°C)	T _{stg.} (°C)
5×7	12.7×17.8	Red(High-luminosity)	LT5037T	LT5038T	15	50 ²	1.45	5	-20 to +60	-20 to +80
8×8	20×20	Yellow-green/Red		LT5017ED	15	50 ²	0.91	5	-20 to +60	-20 to +80
		Yellow-green/Red		LT5027ED	15	50 ²	0.91	5	-20 to +60	-20 to +80
		Red(High-luminosity)	LT5010T		15	50 ²	0.91	5	-20 to +60	-20 to +70
	30.2×30.2	Red	LT5010D		15	50 ²	0.91	5	-20 to +60	-20 to +80
		Red	LT5106D	LT5105D	20	50 ²	0.91	5	-20 to +70	-20 to +80
		Sunset orange	LT5106S		20	50 ²	0.91	5	-20 to +70	-20 to +80
		Yellow-green	LT5106E	LT5105E	20	50 ²	0.91	5	-20 to +60	-20 to +80
		Yellow-green/Red	LT5008ED	LT5007ED	15	50 ²	0.91	5	-20 to +60	-20 to +80
	31.8×31.8	Red	LT5008D		15	50 ²	0.91	5	-20 to +60	-20 to +80
		Yellow-green	LT5008E		15	50 ²	0.91	5	-20 to +60	-20 to +80
		Red(High-luminosity)		LT5013T	15	80 ³	1.45	5	-20 to +60	-20 to +80
16×16	31.9×31.9	Red	LT5014D		15	80 ³	1.45	5	-20 to +60	-20 to +80
		Sunset orange	LT5014S		15	80 ³	1.45	5	-20 to +60	-20 to +80
		Yellow-green	LT5014E		15	80 ³	1.45	5	-20 to +60	-20 to +80
		Yellow-green/Red(High-luminosity)	LT5040ET		15	50 ²	1.45	5	-20 to +60	-20 to +80
	40×40	Red(High-luminosity)	LT5005T		15	80 ³	1.45	5	-20 to +60	-20 to +80
		Red		LT5005D	15	80 ³	1.45	5	-20 to +60	-20 to +80
		Sunset orange		LT5005S	15	80 ³	1.45	5	-20 to +60	-20 to +80
		Yellow-green		LT5005E	15	80 ³	1.45	5	-20 to +60	-20 to +80
		Yellow-green/Red(High-luminosity)	LT5050ET		15/15	50/50 ³	1.45/1.45	5/5	-20 to +60	-20 to +80
		Yellow-green/Red	LT5016ED		15	80 ³	1.45	5	-20 to +60	-20 to +80
	64×64	Yellow-green/Red	LT5026ED		15	80 ³	1.45	5	-20 to +60	-20 to +80

*1 Common pins show row.(Column row) *2 Duty ratio=1/10, Pulse width=0.1ms

*3 Duty ratio=1/16, pulse width=0.1ms

■ Electro-optical Characteristics Figures shown below are values per dot.

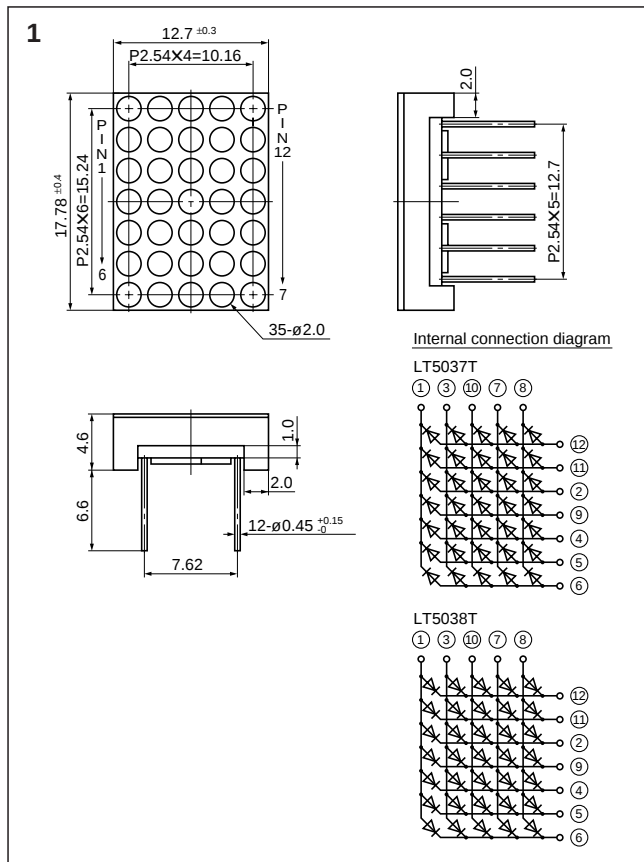
(Ta=25°C)

Number of dots	Outline dimensions (mm)	Radiation color	Model No.		Forward voltage*2 V _F (V)		Luminous intensity*3 I _v (mcd)	Peak emission wavelength λ _p (nm)	Spectrum radiation bandwidth Δλ(nm)	Reverse current		
			Anode common*1	Cathode common*1	TYP.	MAX.	TYP.	TYP.	TYP.	I _F (mA)	I _R (μA) MAX.	V _R (V)
5X7	12.7X17.8	Red(High-luminosity)	LT5037T	LT5038T	1.85	3.0	(4.5)	660	20	50	100	4
8X8	20X20	Yellow-green/Red*		LT5017ED	2.4/2.2	3.0	1.9/1.6	565/635	30/35	50	10	4
		Yellow-green/Red*		LT5027ED	2.4/2.2	3.0	2.5/2.0	565/635	30/35	50	10	4
		Red(High-luminosity)	LT5010T		1.85	2.3	2.2	660	20	50	10	4
	30.2X30.2	Red	LT5010D		2.2	2.7	1.11	635	35	50	10	4
		Red	LT5106D	LT5105D	2.2	2.7	1.11	635	35	10	10	4
		Sunset orange	LT5106S		2.2	2.7	1.11	610	35	10	10	4
		Yellow-green	LT5106E	LT5105E	2.4	2.7	1.69	565	30	10	10	4
		Yellow-green/Red*	LT5008ED	LT5007ED	2.4/2.2	3.0/2.7	2.08/1.56	565/635	30/35	50	10	4
	31.8X31.8	Red	LT5008D		2.2	3.0	2.03	635	35	50	10	4
		Yellow-green	LT5008E		2.4	3.0	2.7	565	30	50	10	4
16X16	31.9X31.9	Red(High-luminosity)		LT5013T	1.85	3.0	1.35	660	20	50	10	4
		Red	LT5014D		2.2	3.0	1.3	635	50	35	10	4
		Sunset orange	LT5014S		2.2	3.0	1.11	610	35	50	10	4
		Yellow-green	LT5014E		2.4	3.0	1.7	565	30	50	10	4
	40X40	Yellow-green/Red(High-luminosity)*	LT5040ET		2.4/1.85	3.0	1.45/1.70	565/660	30/20	50	100	3
		Red(High-luminosity)	LT5005T		1.85	3.0	1.78	660	20	50	10	4
		Red		LT5005D	2.2	2.7	1.04	635	35	50	10	4
		Sunset orange		LT5005S	2.2	2.7	1.11	610	35	50	10	4
		Yellow-green		LT5005E	2.4	3.0	1.3	565	30	50	10	4
		Yellow-green/Red(High-luminosity)*	LT5050ET		2.4/1.85	3.0	(1.9)/(3.0)	565/660	30/20	10	100	3
	64X64	Yellow-green/Red*	LT5016ED		2.4/2.2	3.0	5.2/3.9	565/635	30/35	50	10	4
	96X96	Yellow-green/Red*	LT5026ED		2.4/2.2	3.0	7.15/5.85	565/635	30/35	50	10	4

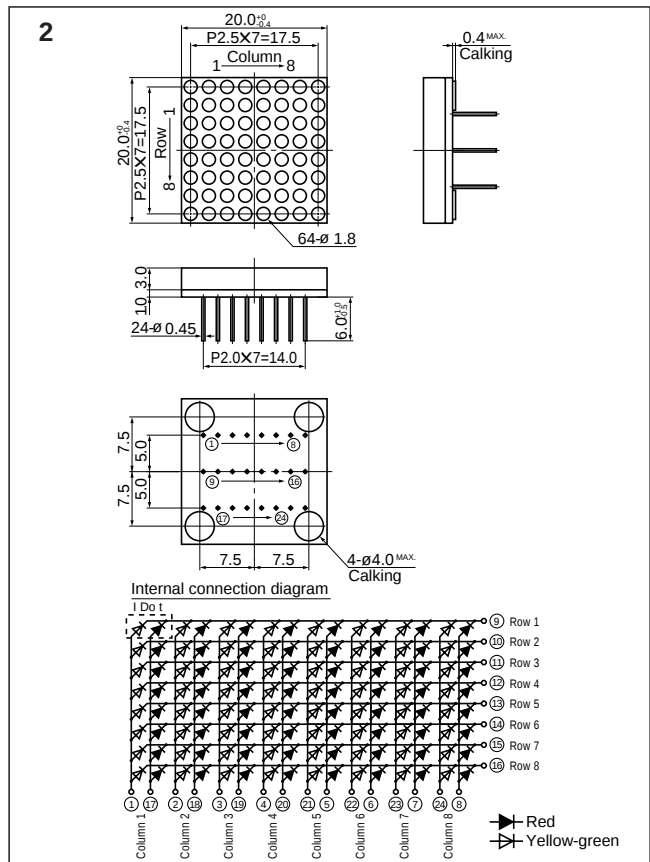
* Each figure shown in the table is yellow-green/red. *1 Common pins show row.(Column row) *2 I_{FM}=50mA *3 I_F=10mA

Dot Matrix LED Outline Dimensions(Unit:mm)

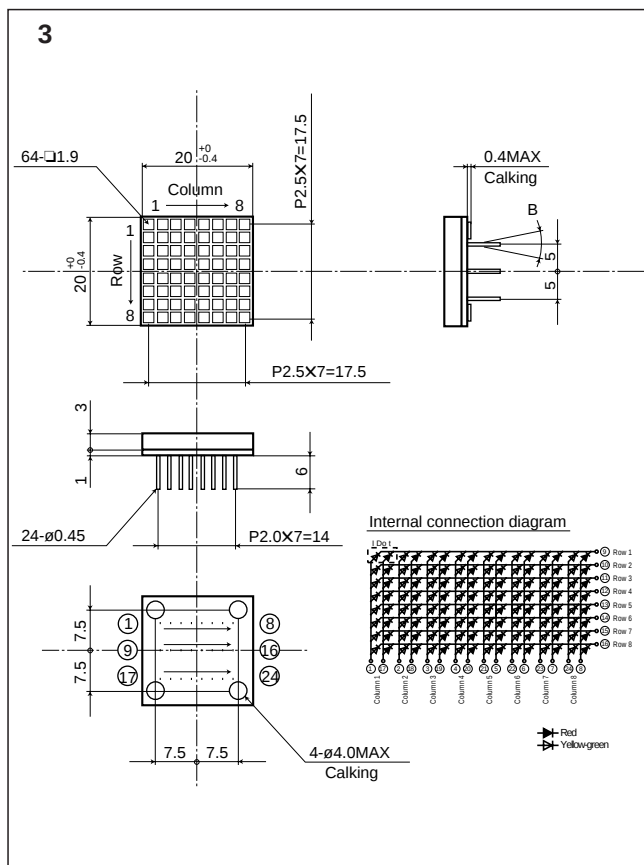
[查询"LT5005D"供应商](#)



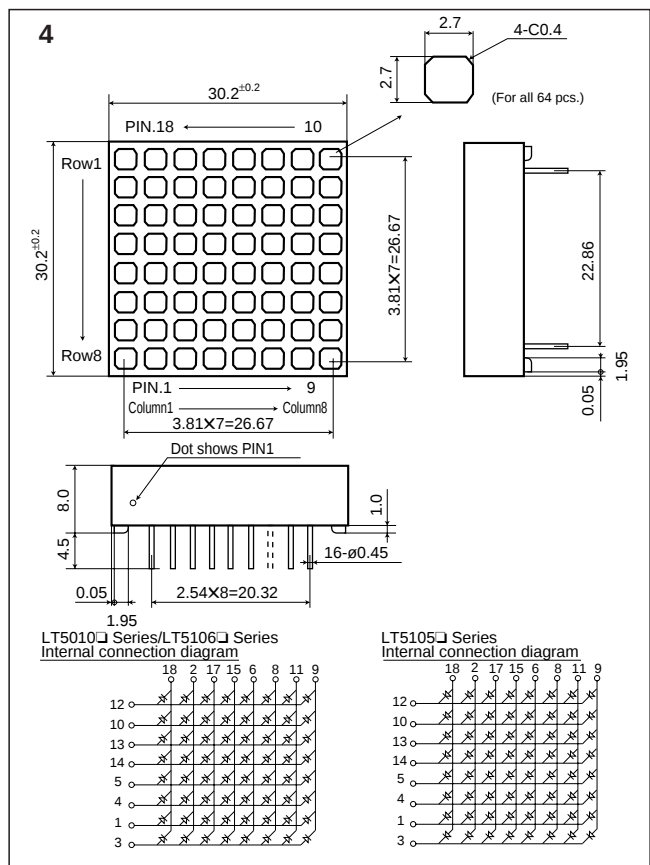
LT5037T/LT5038T



LT5017ED



LT5027ED



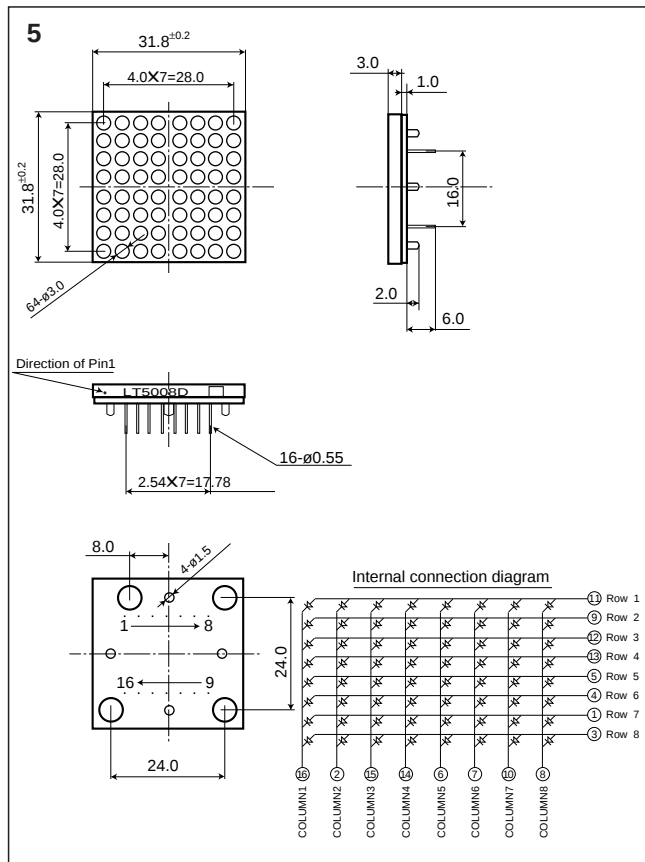
LT5010 Series LT5015 Series/LT5016 Series

(Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

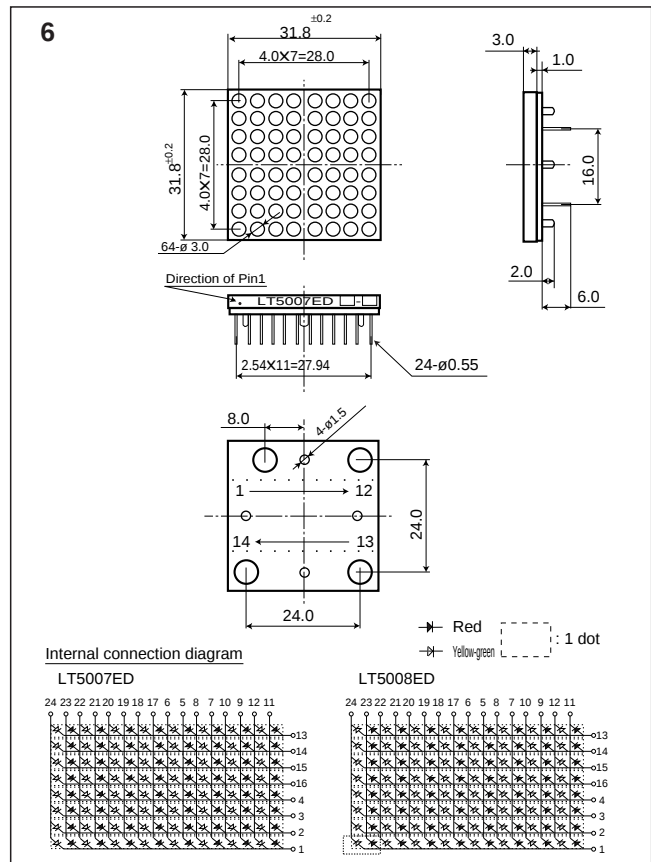
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

Dot Matrix LED Outline Dimensions(Unit:mm)

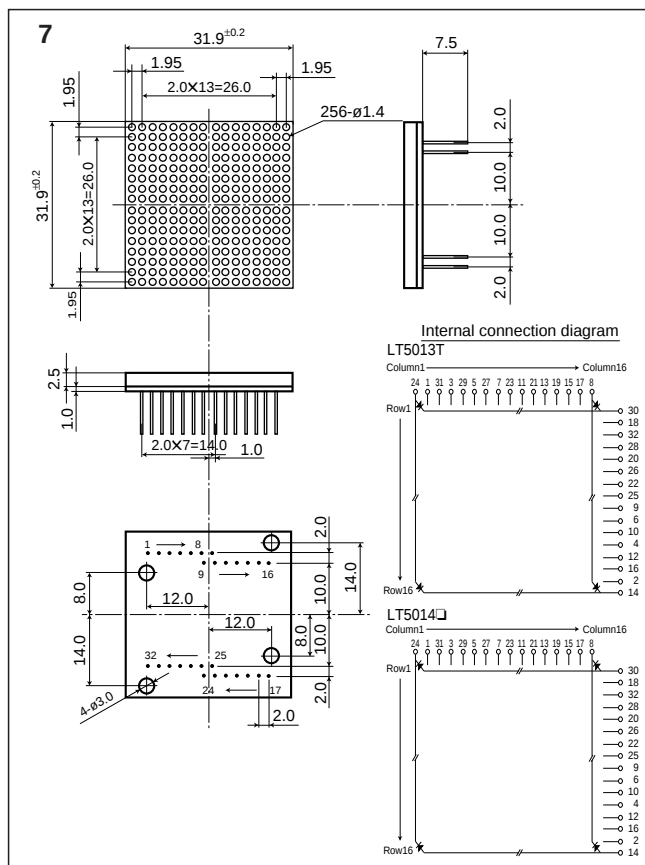
查询"LT5005D"供应商



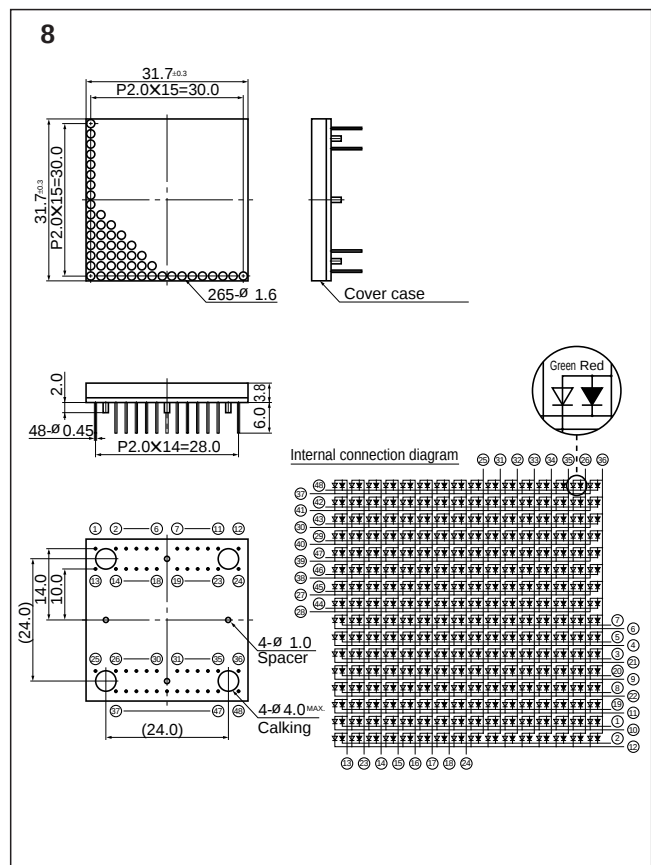
LT5008□ Series



LT5007ED/LT5008ED



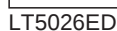
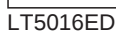
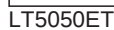
LT5013T/LT5014□ Series



LT5040ET

- (Notice) ● In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.
- (Internet) ● Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

查询"LT5005D"供应商



(Notice) ● In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

(Internet) ● Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)