## SHARP

# LT1E77A

## Chip LED Device

## High-luminosity, Super Compact Chip LED Device

### **■** General Description

Sharp's LT1E77A(high-luminosity, yellow-green) is thin type super compact size chip LED device.(1.6 x 0.8 x 0.5mm) It is suitable for backlight of portable equipment such as cellular phone and pager etc.

#### ■ Features

- (1) Thin type(Thickness: 0.5mm)
- (2) Super compact size(1.6 x 0.8 x 0.5mm)
- (3) Realizes high-luminosity due to originally developed PWB with reflector
- (4) Tape packaged product( 5 000pcs./reel)

### Applications

- (1) Cellular phones
- (2) Pagers
- (3) Other portable equipment
- (4) Various compact equipment that requires high-density mouting

## Outline Dimensions (Unit:mm) 1.6 (0.2) $\overline{1}$ Emitter center 1.2 1.0 \* Plating area Terminal connection (1) Cathode 2 Anode

### ■ Absolute Maximum Ratings

bsolute Maximun	(Ta=	(Ta=25°C)		
Parameter		Symbol	Rating	Unit
Power dissipation		P	84	mW
Forward current		IF	30	mA
*1 Peak forward current		I <sub>FM</sub>	50	mA
Derating factor	DC		0.40	mA/°C
	Pulse		0.67	
Reverse voltage		VR	5.0	V
Operating temperature		Topr	- 30 to +85	°C
Storage temperature		Tstg	- 30 to +100	°C

\*1 Duty ratio=1/10 Pulse width=0.1ms

## **Electro-optical Characteristics**

Electro-optical Characteristics							
	Parameter	Symbol	Condition	Rating	Unit		
*2	Forward voltage	$V_{F}$	I <sub>F</sub> =20mA	2.1	V		
	Luminous intensity	$I_{V}$		(23)	mcd		
	Peak emission wavelength	$\lambda_{ m P}$		565	nm		
	Spectrum radiation bandwidth	Δλ		30	nm		
	Reverse current	$I_R$	$V_R=4V$	MAX.10	μΑ		
	Terminal capacitance	$C_t$	V=0V, f=1MHz	35	pF		

<sup>\*2</sup> Measured by Sharp by EG & G MODEL550 (RADIOMETER/PHOTOMETER SYSTEM)

(Notice)

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- Specifications are subject to change without notice for improvement.

• Data for Sharp's optoelectronic/power devices is provided for internet. ( Address http://www.sharp.co.jp/ecg/)