

PRODUCT DRAWING	CUSTOMER NO.:	
	FILENAME:	REVISION:
DRAWING OF TB1027S	ORIGINAL DATE: 24 JAN 2006	TOTAL PAGES: 3
<input checked="" type="checkbox"/> INITIATE <input type="checkbox"/> REVISE		EFFECTIVE DATE:
REVISIONS		
REV	DESCRIPTION	DATE
ORIGINATOR		DESIGN MGR.

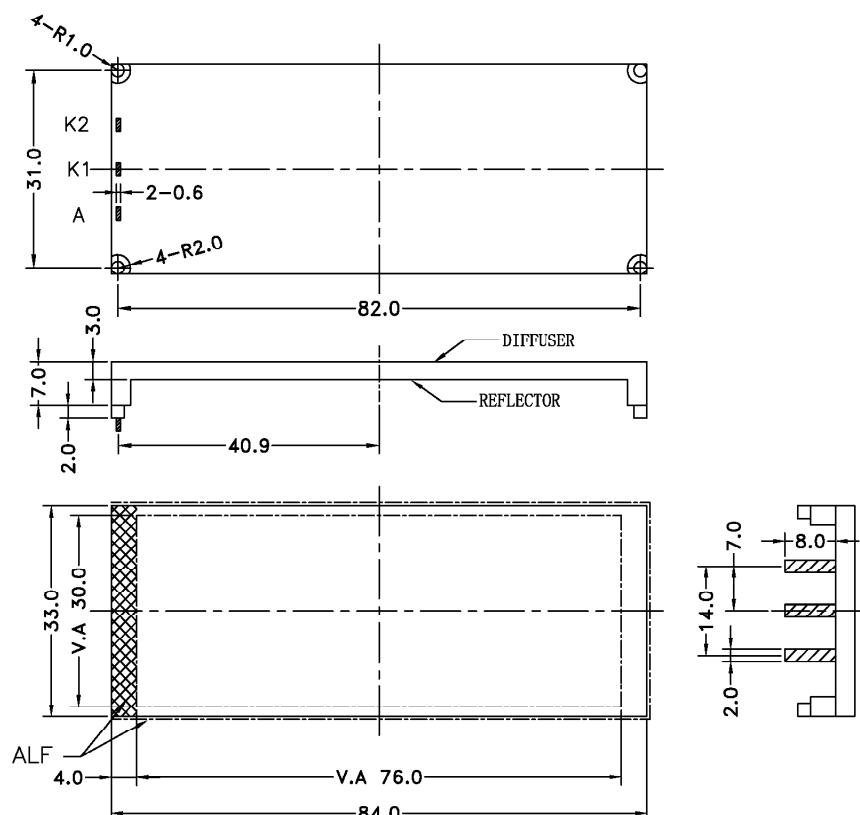


Please sign and fax back this page to confirm this drawing.  
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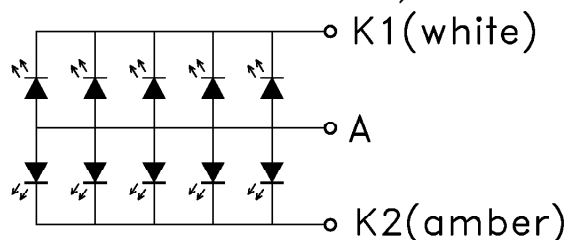
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Authorized Signatures

## 1. MECHANICAL OUTLINE

COLOR : White+Amber

Unspecified Tolerances is  $\pm 0.3$ 

## 2. CIRCUIT DIAGRAM (LED 2x5=10 dies)



## 3. STORAGE &amp; SOLDERING CONDITIONS:

- Store with care. Storing the units in bad condition will cause the reflector sheet and decrease it's adhesive power. Storage The products under the condition: temperature ( $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) and humidity ( $65^{\circ}\text{CRH} \pm 20^{\circ}\text{CRH}$ ) our recommendation.
- The Soldering Temperature is  $260 \pm 5^{\circ}\text{C}$  and Soldering Time should be less than 3 sec, and soldering iron power should be less than 30W.
- The soldering point should be farther than 1.6mm (1/10") from body .

## 4. ABSOLUTE MAXIMUM RATINGS

REV.

Unless specified, The Ambient temperature  $T_a=25^{\circ}\text{C}$ 

Item	Symbol	Conditions	Rating		Unit
			(W)	(A)	
* Absolute maximum forward current	Ifm		100	125	mA
* Peak forward current	Ifp	1 msec Plus 10% Duty Cycle	200	300	mA
Reverse Voltage	Vr		5	5	V
* Power dissipation	Pd		350	250	mW
Operating Temperature Range	Topr		$-30\sim+70^{\circ}\text{C}$		$^{\circ}\text{C}$
Storage Temperature Range	Tstg		$-40\sim+80^{\circ}\text{C}$		$^{\circ}\text{C}$

\*

For operation above  $25^{\circ}\text{C}$ , The Ifm Ifp & Pd must be derated, the Current derating is  $-1.8\times 2\text{ mA}/^{\circ}\text{C}$  for DC drive and  $-4.3\times 2\text{ mA}/^{\circ}\text{C}$  for Pulse drive, the Power dissipation is  $-3.75\times 2\text{ mW}/^{\circ}\text{C}$ . The product working current must not more than the 60 % of the Ifm or Ifp according to the working temperature.

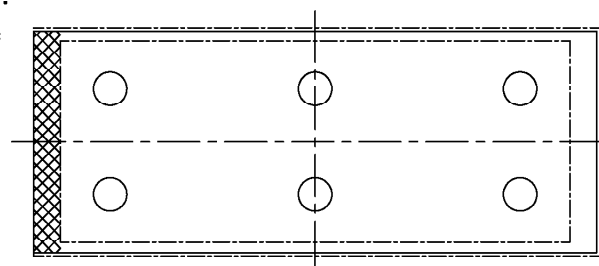
## 5. ELECTRICAL-OPTICAL CHARACTERISTICS

Unless specified, The Ambient temperature  $T_a=25^{\circ}\text{C}$ 

Item	Symbol	(White)			(Amber)			Unit	Condition
		min.	typ.	max.	min.	typ.	max.		
Forward Voltage	Vf	3.1	3.3	3.5	1.85	1.95	2.05	V	If= 80X2 mA
Reverse Current	Ir			100			100	$\mu\text{A}$	Vr= 5 V
Peak wave length	$\lambda_p$				586	590	595	nm	If= 80X2 mA
Spectral Line Half width	$\Delta\lambda$		30			35		nm	If= 80X2 mA
* Luminance	Lv							$\text{cd}/\text{m}^2$	If= 80X2 mA

\*

The luminance is the average value of 6 points, and The  $L_{v\text{max.}}/L_{v\text{min.}}$  is less than 1.5 Typical (max 1.7 ). The measurement instrument is BM-7 luminance Colorimeter. The aperture is  $\phi 5\text{ mm}$ .



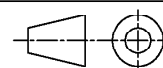
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