

PHOTOTRANSISTOR PRODUCTS SPECIFICATION

HPTMIB-4D/TR7

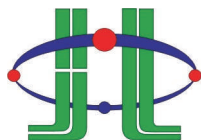


Drawn by	Checked by	Approved by



DATE:2009/2/9

REV:E



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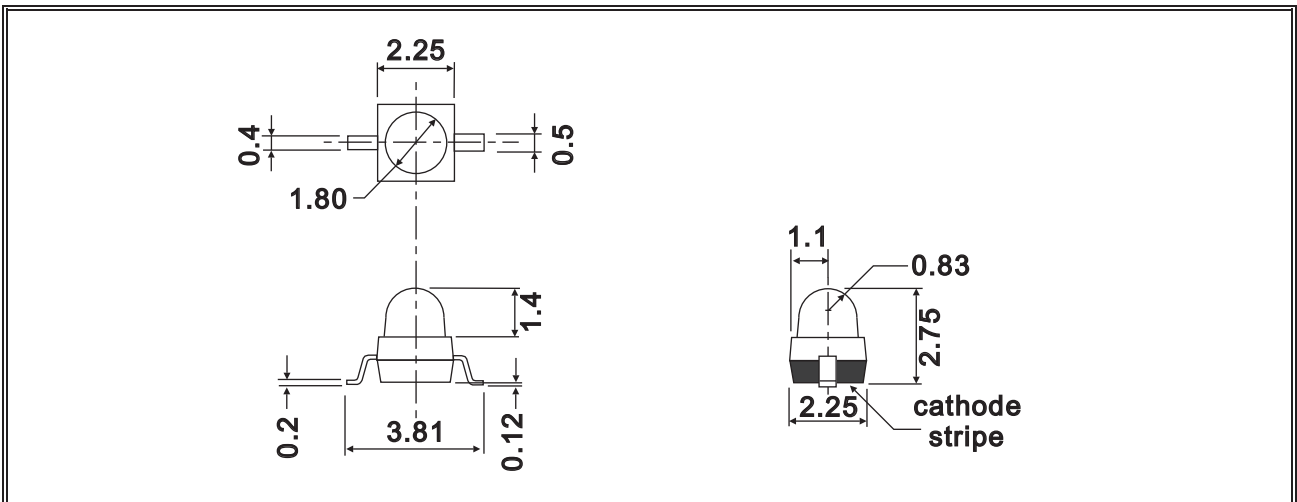
No.27 Line 466 Sec.2,Cannng-nan Rd. Wu-chi Town Taichung Shien, Taiwan, R.O.C.

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DEVICES

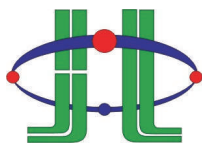
Part Number	Lens		Source	
	Color	Diffusion	Dice Source	Color
HPTMIB-4D/TR7	Water clear	Non-Diffused	-----	Phototransistor

PACKAGE DIMENSIONS



NOTE:

- 1.All dimensions are in millimeter.
- 2.specifications are subject to change without notice.
- 3.Tolerance is ± 0.3 mm unless otherwise noted.

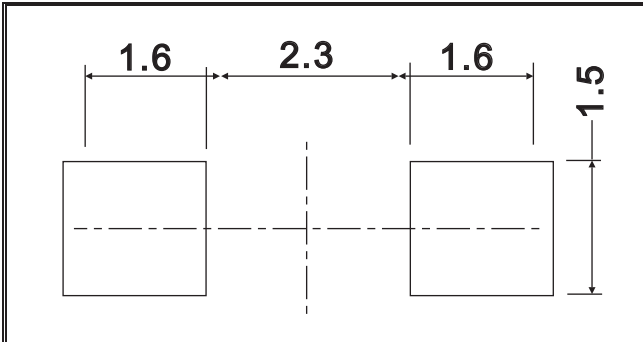


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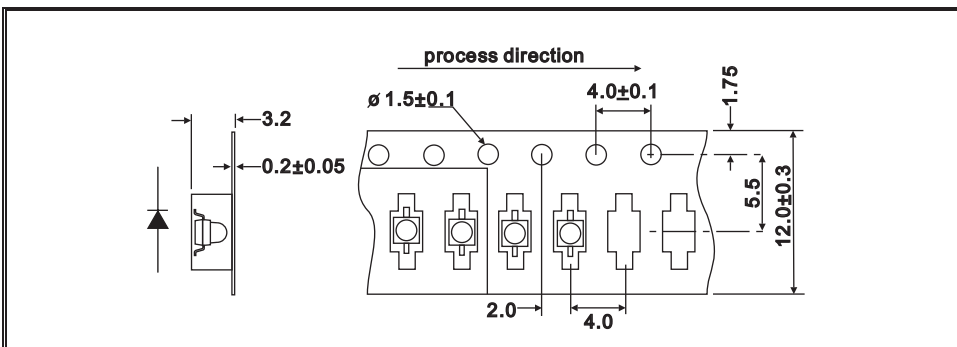
RECOMMENDED SOLDERING PATTERN



NOTE:

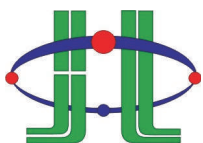
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TAPE SPECIFICATIONS



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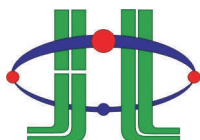
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ABSOLUTE MAXIMUM RATINGS

TA=25°C

PARAMETER	SYMBOL	MAX. RATING	UNIT
Power Dissipation	Pd	150	mW
Sensitive Area	AA	0.19	mm
Collector-Emitter Voltage	Vceo	20	V
Emitter-Collector Voltage	Veco	5	V
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Dip Soldering Temperature (3mm from case Bottom 260 °C for 5 seconds)			

*Iron soldering in 350°C within 5 seconds will not cause damage to the dice. But be aware of the high temperature will not only make the epoxy soften but also cause the lead moving and the gold wire broken and even open. So before returning to the normal temperature PLEASE AVOID any serious pressure on the top of epoxy and lead.



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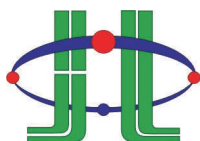
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ELECTRIC-OPTICAL CHARACTERISTICS

TA=25°C

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Angle of Half Sensitive	$2\theta_{1/2}$			24		deg
Collector-Emitter Voltage	V_{ceo}	$I_c=1mA,$ $E_e=0mw/cm^2$	20			V
Emitter-Collector Voltage	V_{eco}	$I_c=100\mu A,$ $E_e=0mw/cm^2$		5		v
Collector-Emitter Saturation Voltage	V_{ces}	$I_c=0.5mA,$ $I_b=100\mu A$			0.4	V
Collector Current (Saturation)	I_c	$V_{ce}=5V,$ $E_e=0.5mw/cm^2$		1.2		mA
Collector Dark Current	I_{ceo}	$V_{ce}=10V,$ $E_e=0mw/cm^2$			100	nA
Ries Time	T_r	$V_{ce}=5V,$ $I_c=1mA,$ $R_L=1000\Omega$		15		μS
Fall Time	T_f			20		μS
Peak Wavelength	λ_p			900		nm
Sensitivity Wavelength	λ		500		1100	nm

*1.The dominate wavelength , λ_d , is derived from the CIE Chromaticity Diagram and represents the color of the device.

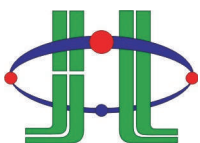
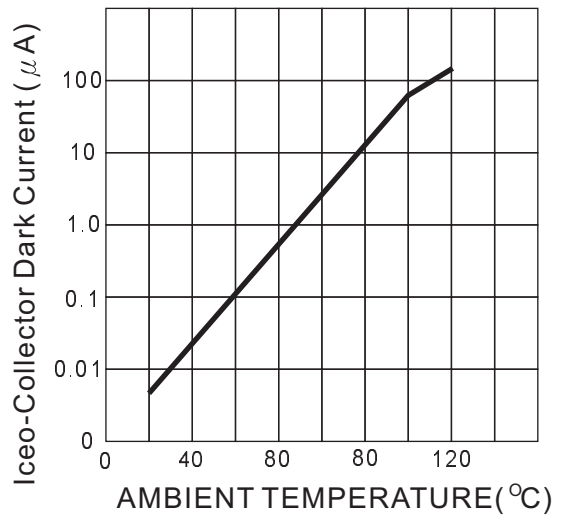
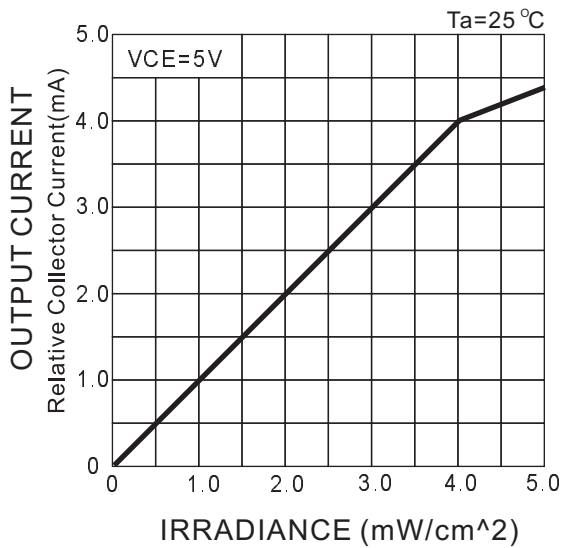
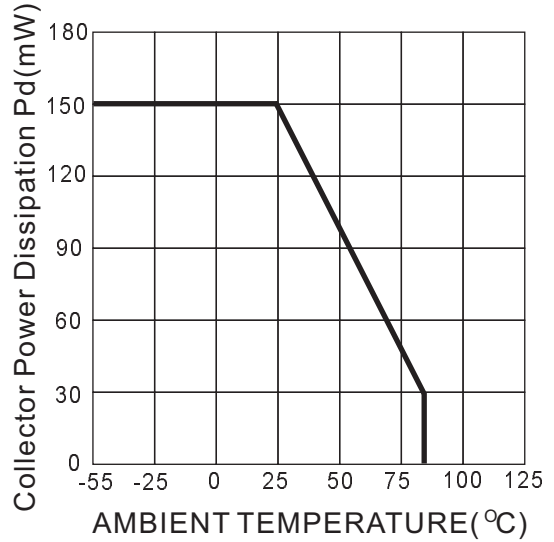
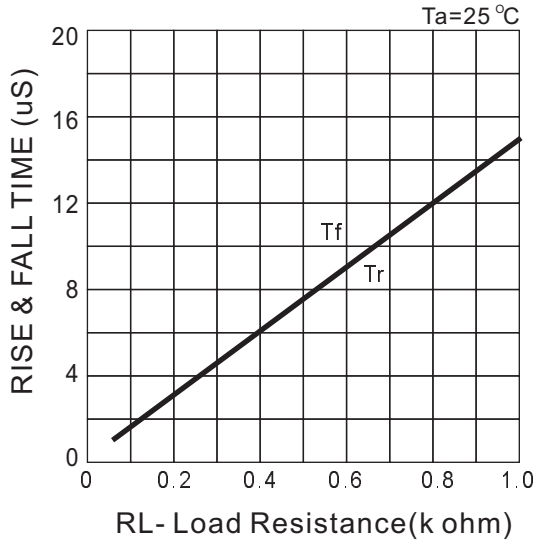


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TYPICAL ELECTRICAL OPTICAL CHARACTERISTICS CURVES

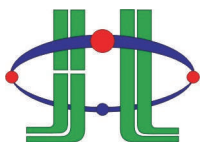
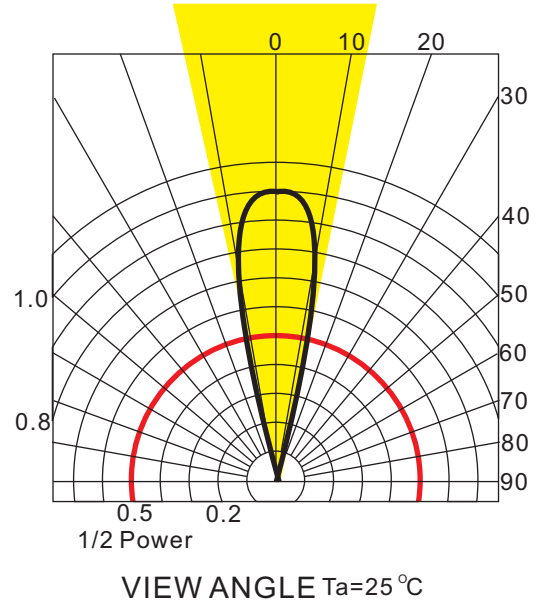
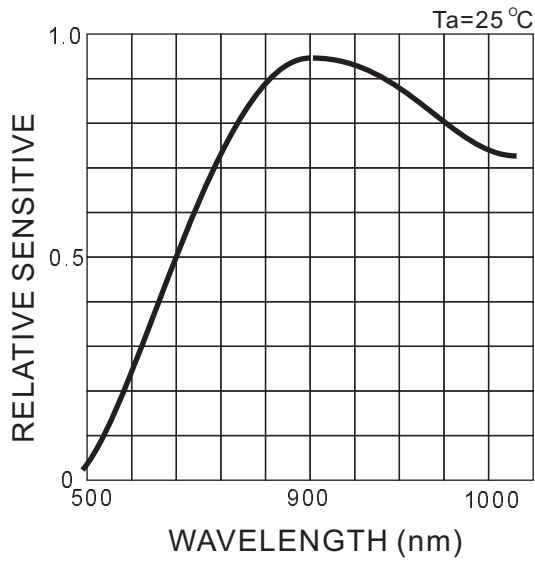


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