

INFRARED PRODUCTS

(Photo-Interrupter)
Property of Huey-Jann only

Device No: HINT-3120

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FEATURE:

1. NON-CONTACT SWITCHING.
2. FOR DIRECT PC BOARD OR DUAL-IN-LINE SOCKET MOUNTING.
3. FAST SWITCHING SPEED.
4. CHOICE OF MOUNTING CONFIGURATION.
5. REFLOW SOLDERING APPLICABLE.

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787

[Http://www.100y.com.tw](http://www.100y.com.tw)

SCOPE:

	Item	Material	Parts No
Input	Infrared emitter	GaAlAs/GaAs	Huey-Jann C dice
Output	Photo-transistor	NPN Silicon	Huey-Jann D dice

ELECTRO-OPTICAL CHARACTERISTICS:

	Item	Symbol	Minimum	Typical	Maximum	Unit	Condition
Input	Forward voltage	V_F	—	1.2	1.6	V	$I_F=20\text{mA}$
	Reverse current	I_R	—	—	100	μA	$V_R=5\text{V}$
	Peak wave length	λ_p	—	840	—	nm	$I_F=20\text{mA}$
Output	Collector dark current	I_{ceo}	—	—	100	nA	$V_{CE}=10\text{V}$ O.L.X
	Sensitive wave length	λ_p	—	880	—	nm	
Coupling	Light current	I_c	1.0	—	—	mA	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$
	Collector dark current	I_{ceo}	—	—	20	μA	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$
	Collector Emitter saturation voltage	$V_{CE(sat)}$	—	0.4	1.0	V	$I_F=20\text{mA}$ $I_c=0.1\text{mA}$
	Rise time	t_r	—	40	—	μsec	$V_{CC}=5\text{V}$ $I_c=2\text{mA}$
	Fall time	t_f	—	60	—	μsec	$R_L=100$

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ABSOLUTE MAXIMUM RATING:

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	Item	Symbol	Rating	Unit
INPUT	Power dissipation	PD	75	mW
	Forward current	IF	50	mA
	Reverse voltage	VR	5	V
	Pulse forward current *1	IFP	1	A
OUTPUT	Collector dissipation	PC	75	mW
	Collector current	IC	30	mA
	Voltage between collector and emitter	VCEO	30	V
	Voltage between emitter and collector	VECO	5	V
Derating factor *2			-0.8	mA / °C
Operating temperature		Topr	-20~+75	°C
Storage temperature		Tstg	-25~+85	°C
Soldering temperature *3		Tsol	260(within 5 seconds)	°C

1. Duty Ratio=1/10, Pulse Width=0.1ms.

2. Ta > 25 °C ~ Topr (max).

3. At the position of 1.6mm from the bottom face of resin package.

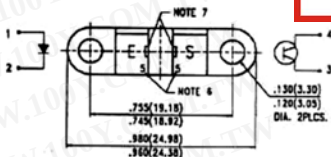
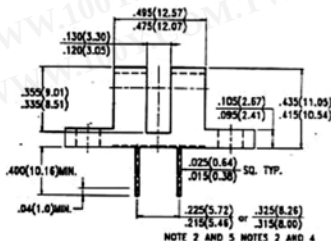
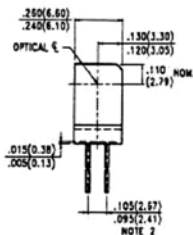
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PACKAGE DIMENSION:



NOTES:

All dimensions are in inch (millimeters).

Dimension controlled at housing surface only.

Above specification may be changed without notice.

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