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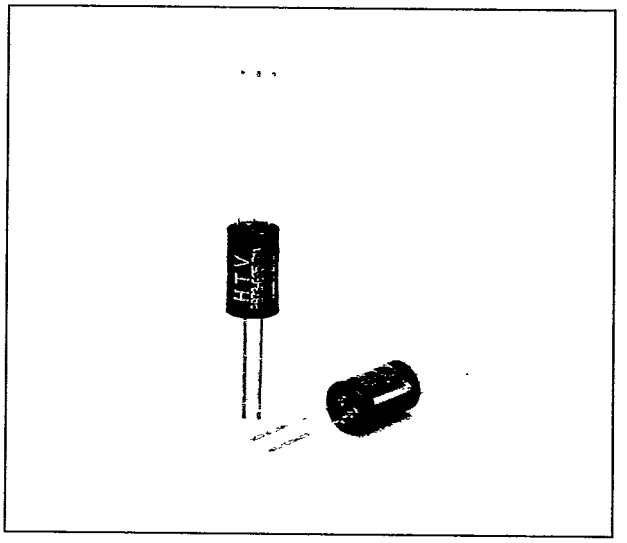
TECHNICAL DATA

DUAL CdS OUTPUT TYPE PHOTOCOUPLERS P873-G35-911, P873-13

T-41-81

LED input, Dual CdS cell output, Cylindrical package

The P873-G35-911 and P873-13 are photocouplers which use a visible LED on the input side and a dual CdS cell on the output side. The P873-G35-911 is an electrically-connected dual CdS cell, while the P873-13 employs independent dual CdS cells. Both feature low harmonic distortion, making them suitable for use in audio instruments and electronic musical instruments.



FEATURES

- **Dual CdS cell output**
- **Low harmonic distortion**
- **Cylindrical package**

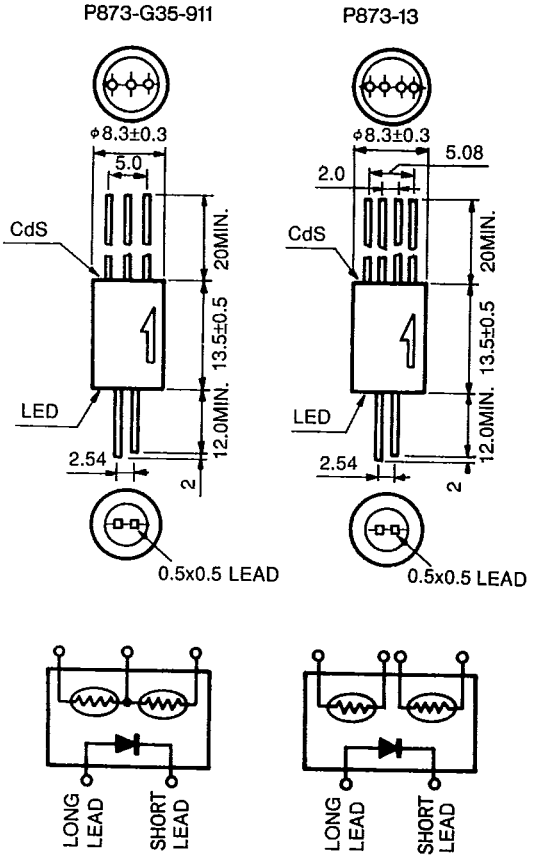
APPLICATIONS

- **Audio instruments**
- **Electronic musical instruments**
- **Medical electronic equipment**

MAXIMUM RATINGS (Ta = 25°C)

	Parameters	Symbols	Ratings	Unit
Input	Forward Current	I_F	25	mA
	Reverse Voltage	V_R	4	Vdc
	Power Dissipation	P	100	mW
Output	Supply Volage	V_S	100	Vdc
	Power Dissipation	P_O	30	mW
Operating Temperature		T_{opr}	−30 ~ +50	°C
Storage Temperature		T_{stg}	−30~ +50	°C

Figure 1: Dimensional Output and Pin Connection (Unit:mm)



Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein.

DUAL CdS OUTPUT PHOTOCOUPLERS P873-G35-911, P873-13

ELECTRICAL CHARACTERISTICS (Ta = 25°C, One Element)

	Parameters	Symbols	Conditions	P873-G35-911			P873-13			Unit
				Min.	Typ.	Max.	Min.	Typ.	Max.	
Input	Forward Voltage	V_F	I_F = 20mA	–	2.1	–		2.1		Vdc
	Recommended Forward Current	I_F		–	20			20		mA
Output	ON Resistance	R_{ON}	I_F = 20mA	0.3	–	1.0	–	–	10	kΩ
	OFF Resistance	R_{OFF}	10 seconds after I_F goes OFF	1	–	–	10	–	–	MΩ
Transfer Characteristics	Input-Output Isolation Voltage	V_{iso}	RH40 ~ 60%, 1 minute	5000	–	–	5000	–	–	Vrms
	Rise Time (1)	t_r	I_F = 20mA	–	5.0	20	–	4.0	20	ms
	Fall Time (1)	t_f		–	5.0	20	–	6.0	20	ms

(1) Response Time Measuring Circuit

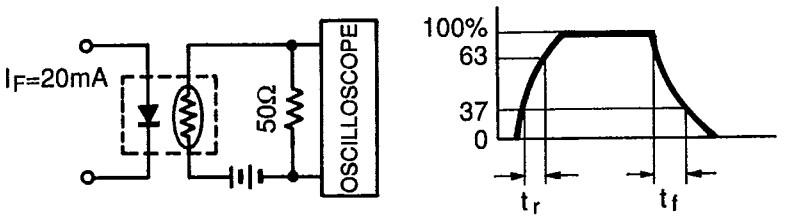


Figure 2: LED Allowable Forward Current vs. Temperature

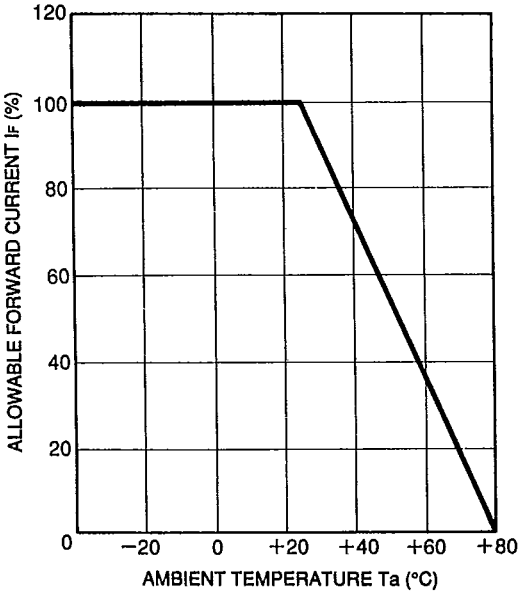


Figure 3: CdS Cell Allowable Power Dissipation vs. Temperature

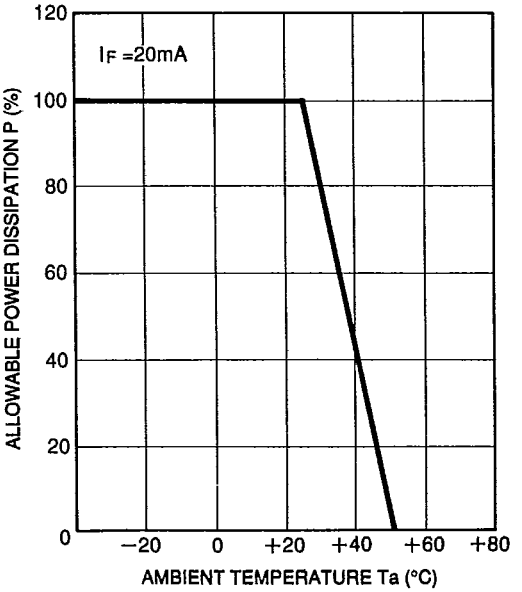


Figure 4: LED Forward Current vs. Forward Voltage

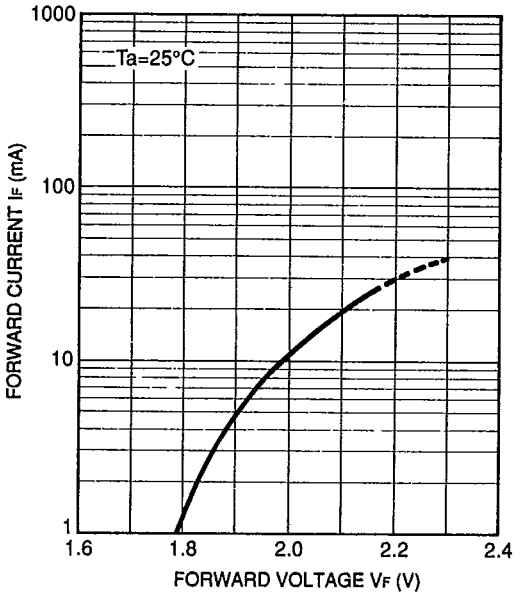


Figure 5: Output Resistance vs. Forward Current

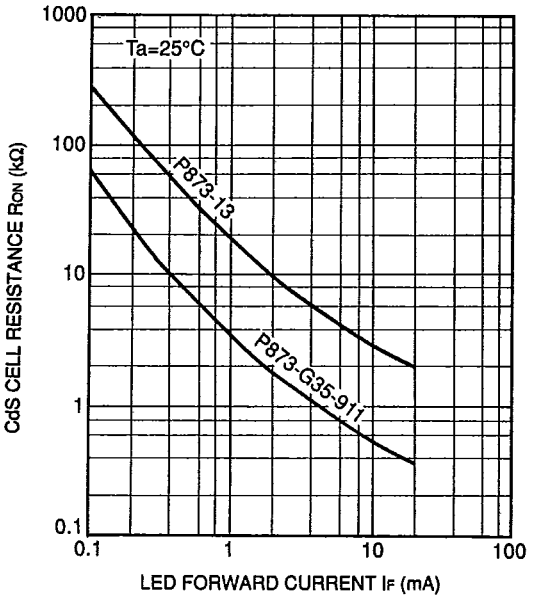


Figure 6: Rise/Fall Time vs. Load Resistance (G873-G35-911)

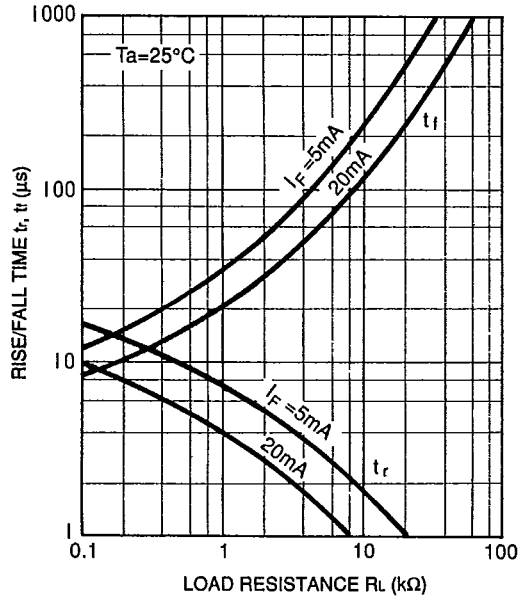


Figure 7: Output Resistance vs. Temperature (G873-G35-911)

