

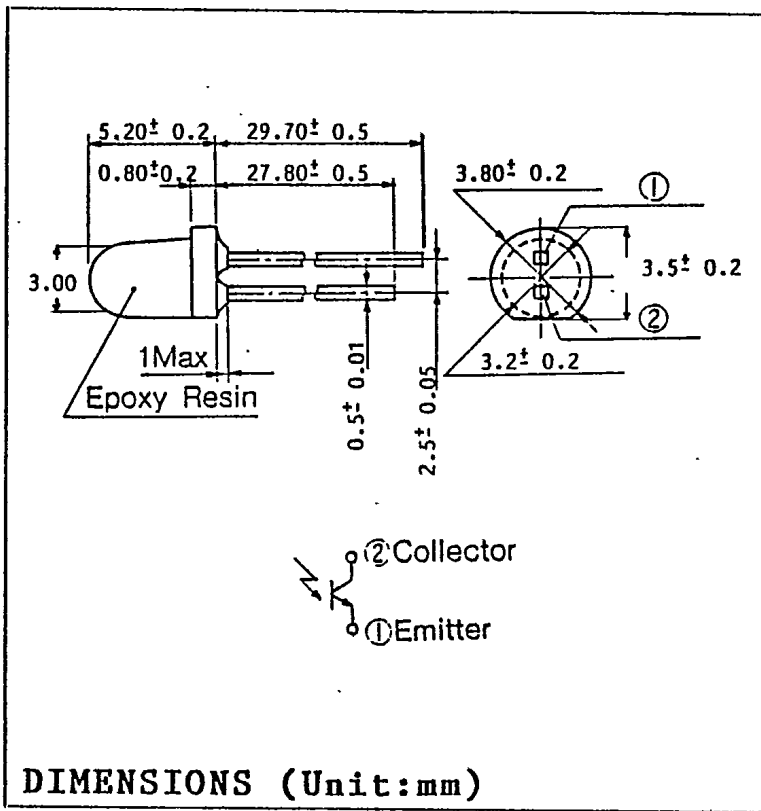
TECHNICAL DATA SHEET

ST-8LR2

SILICON PHOTOTRANSISTOR

T-41-61

The ST-8LR2 is a low cost, high sensitivity NPN silicon phototransistor mounted in a black plastic package. With a built-in lens this small phototransistor permits narrow angular response.



MAXIMUM RATINGS (T_a = -25°C)

ITEM	SYMBOL	RATING	UNIT
C-E Voltage	V _{ceo}	20	V
E-C Voltage	V _{eco}	5	V
Collector current	I _c	20	mA
Collector power dissipation	P _c	75	mW
Operating temp.	T _{opr.}	-20 +80	°C
Storage temp.	T _{stg.}	-20 +80	°C
Soldering temp. *1	T _{sol.}	240	°C

*1. 2mm t=5sec.

DIMENSIONS (Unit:mm)

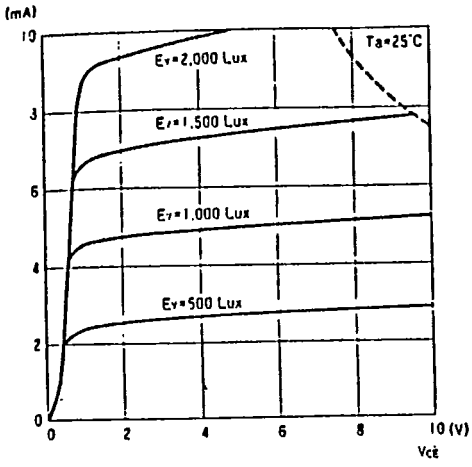
ELECTRO-OPTICAL CHARACTERISTICS (T_n = 25°C)

ITEM	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector dark current	I _{ceo}	V _{ceo} = 10V		1	100	nA
Light current	I _L	V _{ce} = 3V, 1,000Lux *2	0.5	5.0	20	mA
C-E saturation Voltage	V _{ce(sat)}	I _c = 0.2mA, 2,000Lux *2		0.15	0.4	V
Switching speeds	Rise Time	V _{cc} = 10V I _c = 1mA R _L = 100Ω		2.5		μsec.
	Fall Time			3.8		μsec.
Spectral sensitivity	λ		720~1000			nm
Peak wavelength	λ _p			800		nm
Half angle	Δθ			±15		deg.

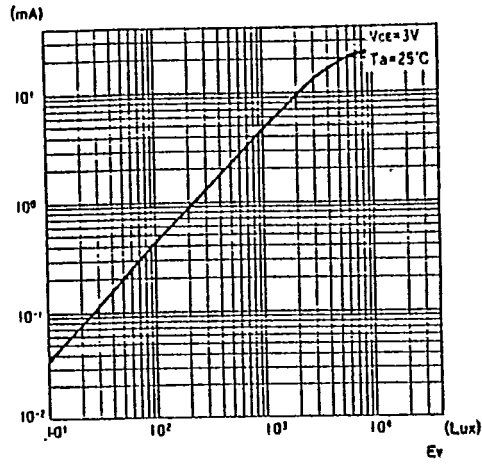
*2. = 2856°K

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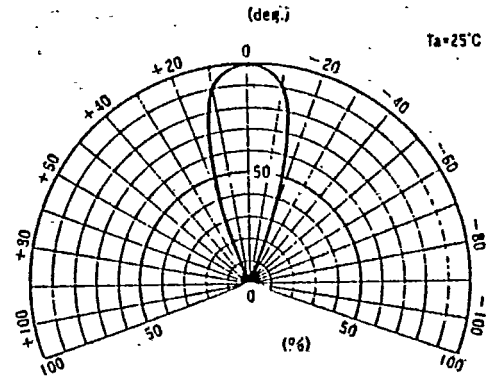
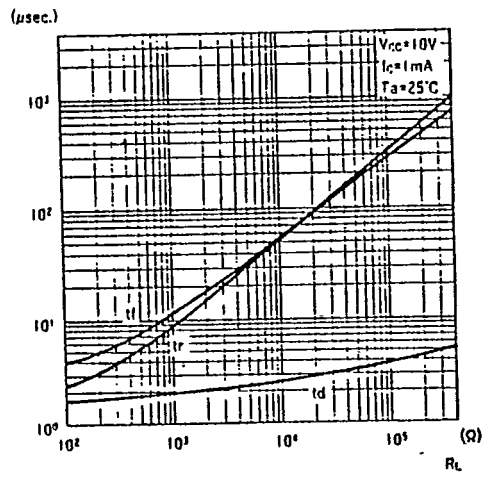
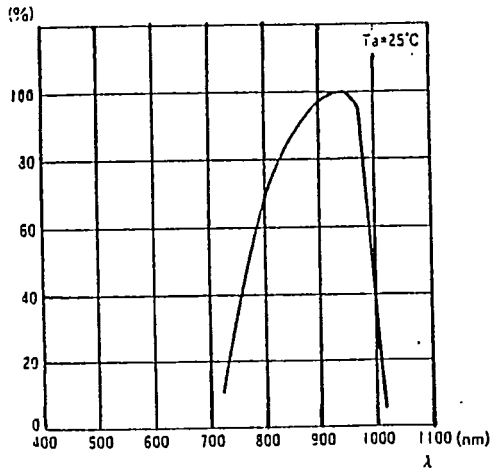
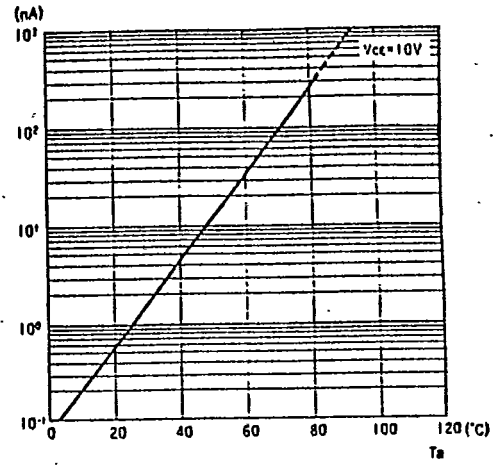
I_c/V_{CE}



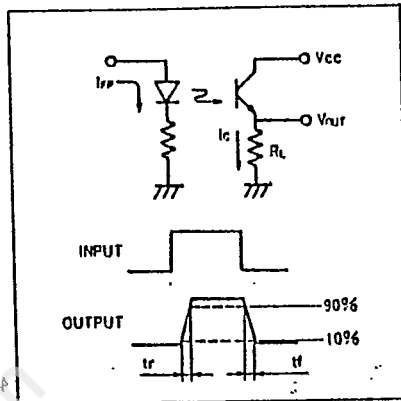
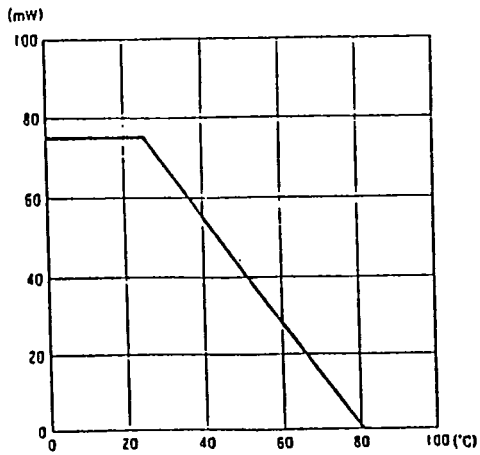
I_c/E_v



I_{CE0}/T_a



P_c/T_a



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