



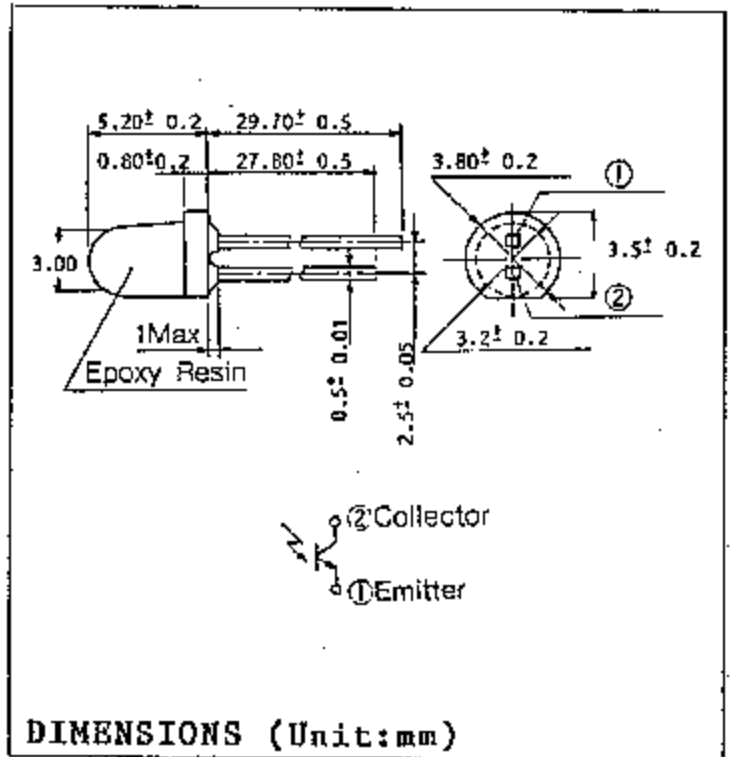
TECHNICAL DATA SHEET

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)

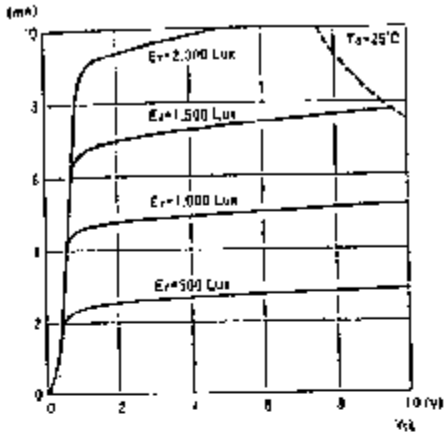
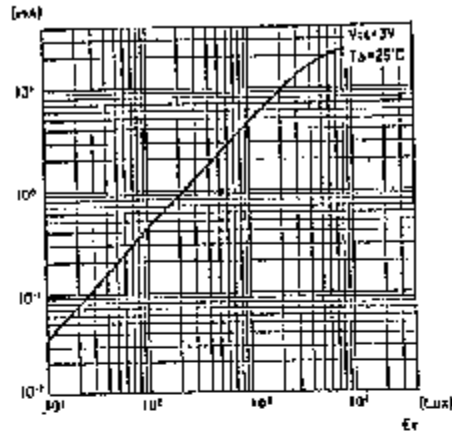
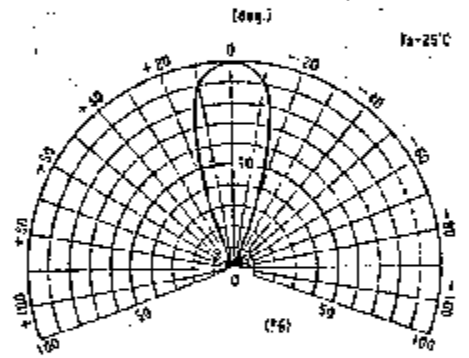
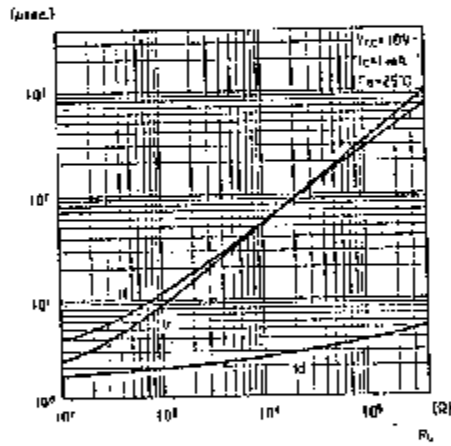
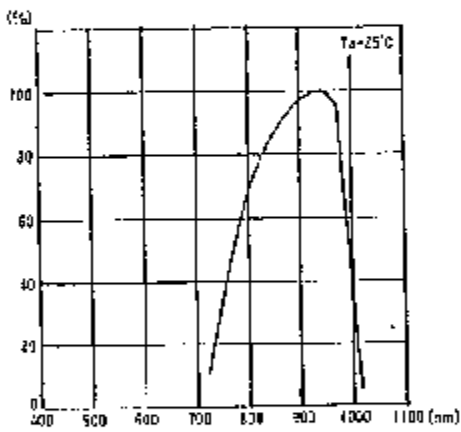
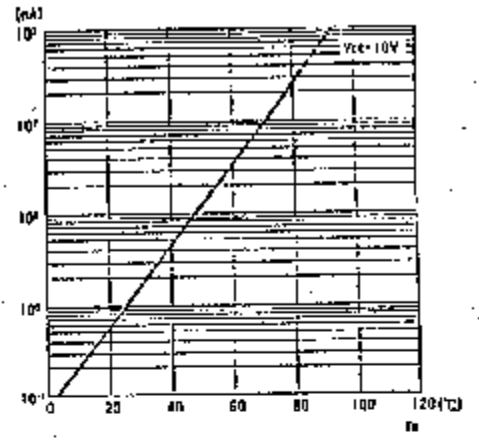
ITEM	SYMBOL	RATING	UNIT
C-E Voltage	V _{ce}	20	V
E-C Voltage	V _{ec}	5	V
Collector current	I _c	20	mA
Collector power dissipation	P _c	75	mW
Operating temp.	T _{opr.}	-20 +80	°C
Storage temp.	T _{stg.}	-20 +80	°C
Soldering temp. *1	T _{sol.}	240	°C

*1. 2mm t=5sec.

ELECTRO-OPTICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITIONS	(T _a = 25°C)			UNIT
			MIN.	TYP.	MAX.	
Collector dark current	I _{ceo}	V _{ce} = 10V		1	100	nA
Light current	I _L	V _{ce} = 3V, 1,000Lux *2	0.5	5.0	20	nA
C-E saturation Voltage	V _{ce(sat)}	I _c = 0.2mA, 2,000Lux *2		0.15	0.4	V
Switching speeds	Rise Time	V _{ce} = 10V I _c = 1mA R _L = 100Ω		2.5		μsec.
	Fall Time			3.0		μsec.
Spectral sensitivity	λ		720~1000			nm
Peak wavelength	λ _p			800		nm
Half angle	θ ₀			±15		deg.

*2. = 2856°K

I_c/V_{ce}  I_c/E_v  I_{ce0}/T_a  P_c/T_a 