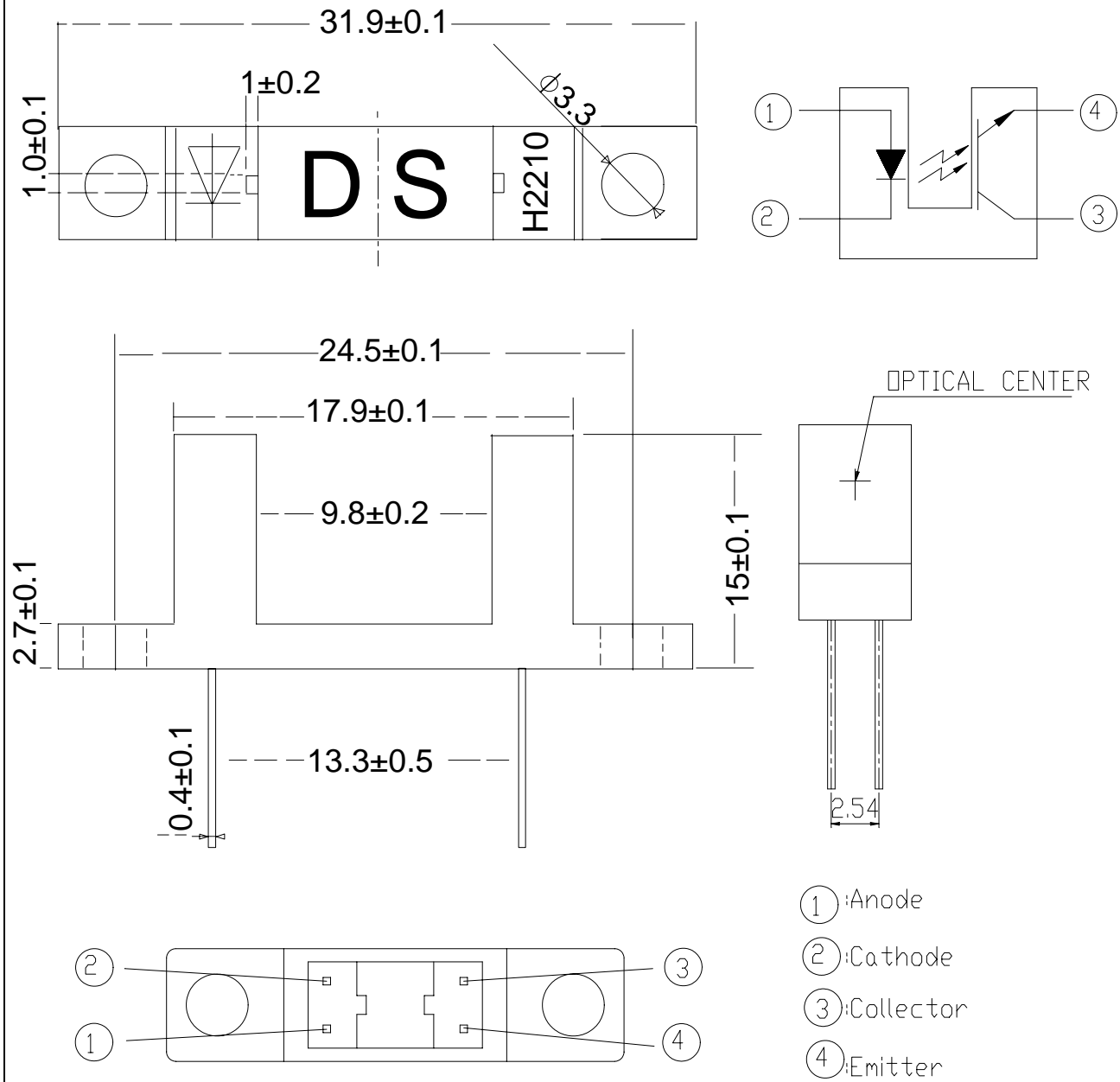




MODEL NO: H2210

■ Package Dimensions :





MODEL NO: H2210

■ Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at (or below) 25°C Free Air Temperature	Pd	75	mW
	Reverse Voltage	V <sub>R</sub>	5	V
	Forward Current	I <sub>F</sub>	50	mA
	Peak Forward Current Pulse width ≤100μs, Duty cycle=1%	I <sub>FP</sub>	1	A
Output	Collector Power Dissipation	P <sub>C</sub>	75	mW
	Collector Current	I <sub>C</sub>	20	mA
	Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
	Emitter-Collector Voltage	V <sub>ECO</sub>	5	V
Operating Temperature		Topr	-25~+85	°C
Storage Temperature		Tstg	-40~+85	°C
Lead Soldering Temperature (1/16 inch from body for 5 seconds)		Tsol	260	°C

■ Electro-Optical Characteristics (Ta=25°C)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Input	Forward Voltage	V <sub>F</sub>	-	1.2	1.6	V	I <sub>F</sub> =20mA
	Reverse Current	I <sub>R</sub>	-	-	10	μA	V <sub>R</sub> =5V
	Peak Wavelength	λ <sub>p</sub>	-	940	-	nm	I <sub>F</sub> =20mA
	View Angle	2θ <sub>1/2</sub>	-	60	-	Deg	I <sub>F</sub> =20mA
Output	Collector Dark Current	I <sub>CEO</sub>	-	-	100	nA	V <sub>CE</sub> =10V
Transfer Characteristic	C-E Saturation Voltage	V <sub>CE(sat)</sub>	-	-	0.4	V	I <sub>C</sub> =0.5mA I <sub>F</sub> =20mA
	Collector Current	I <sub>C(ON)</sub>	0.9	4	15	mA	V <sub>CE</sub> =5V I <sub>F</sub> =20mA
	Rise time	t <sub>r</sub>	-	20	-	μsec	V <sub>CE</sub> =5V
	Fall time	t <sub>f</sub>	-	20	-	μsec	I <sub>C</sub> =1mA R <sub>L</sub> =1KΩ



MODEL NO: H2210

Typical Characteristics For DR

Fig. 1 Forward Current vs. Ambient Temperature

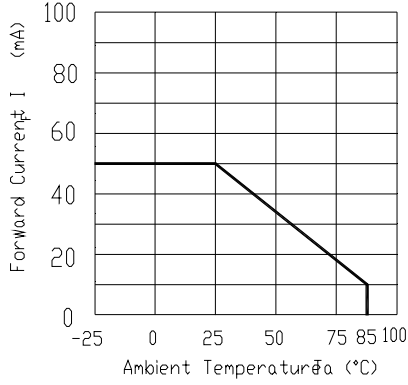


Fig. 2 Spectral Distribution

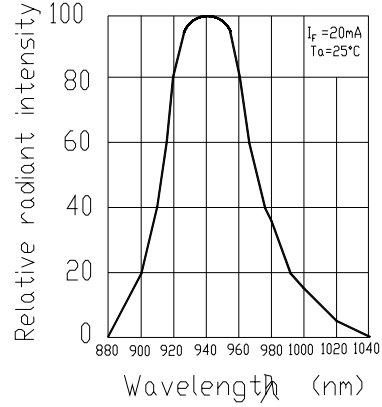


Fig. 3 Peak Emission Wavelength vs. Ambient Temperature

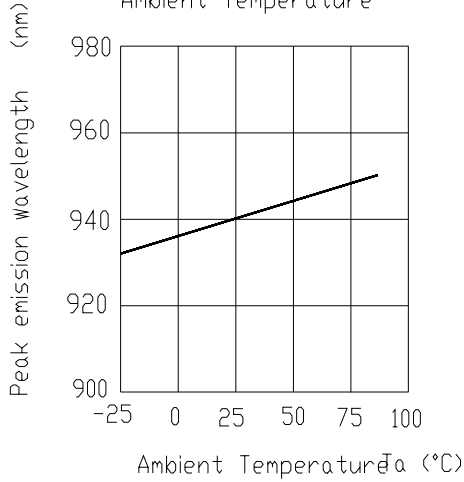


Fig. 4 Forward Current vs. Forward Voltage

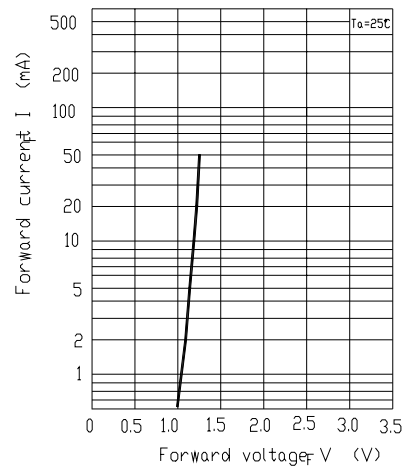


Fig. 5 Forward Voltage vs. Ambient Temperature

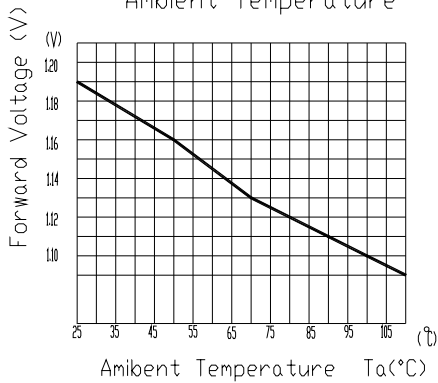
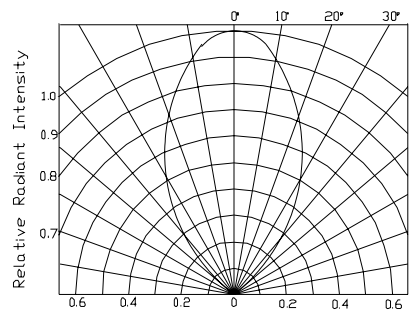


Fig. 6 Relative Radiant Intensity Angular Displacement





MODEL NO: H2210

### ■ Typical Characteristics For DT

Fig.1 Collector Power Dissipation vs. Ambient Temperature

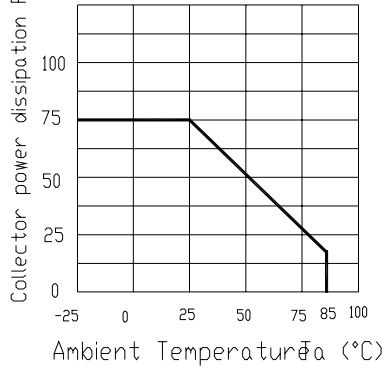


Fig.2 Collector Dark Current vs. Ambient Temperature

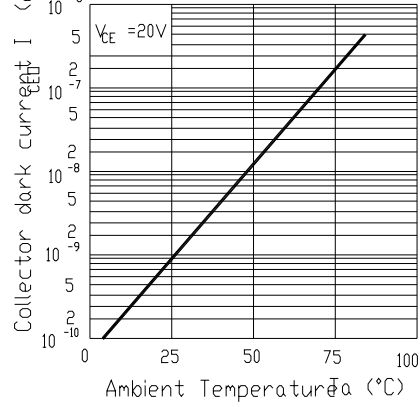


Fig.3 Spectral Sensitivity

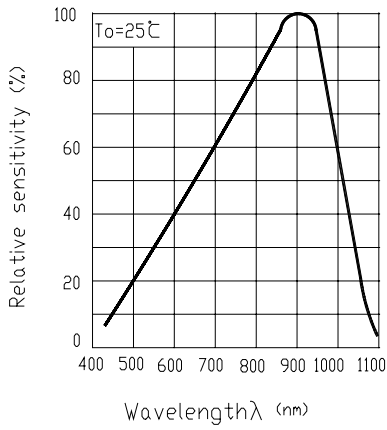
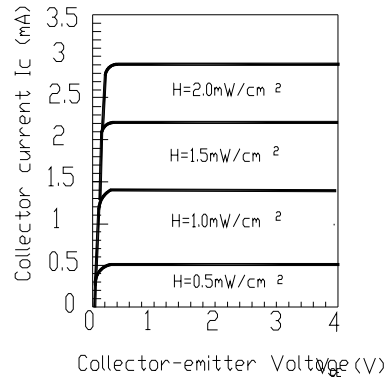


Fig.4 Collector Current vs. Collector-emitter Voltage



### ■ Typical Characteristics For ITR

Fig.1 Relative Collector Current vs. Shield Distance(1)

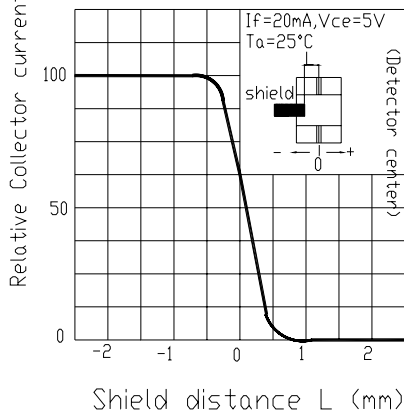


Fig.2 Relative Collector Current vs. Shield Distance(2)

