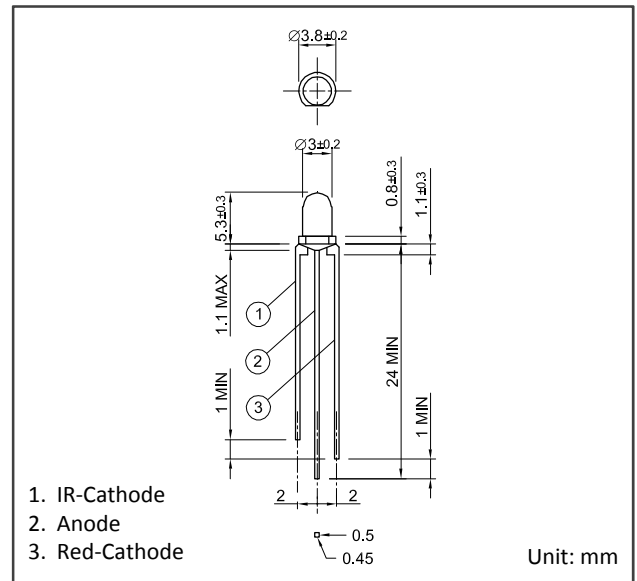


Features

- Red and IR emitters in a single package
- Epoxy mold

Applications

- Bill recognition
- Color sensors

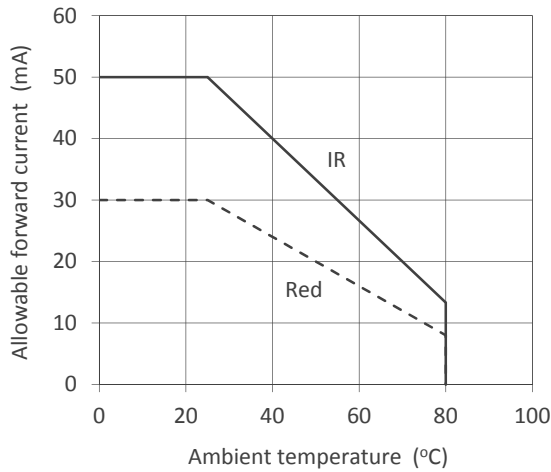
**Absolute Maximum Ratings**

Parameter	Symbol	Value		Unit	Note
		Infrared	Red		
Forward current	I_F	50	30	mA	Ta=25°C
Peak forward current	I_{FP}	0.5	0.3	A	Pulse width=100μs Duty ratio=0.1%
Reverse voltage	V_R	6	6	V	
Power dissipation	P_D	70	70	mW	Max. power dissipation=100mW
Operating temperature	T_{opr}	-20 to +80		°C	Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100		°C	Avoid dew condensation
Soldering temperature	T_{sol}	260		°C	Max 5 sec.

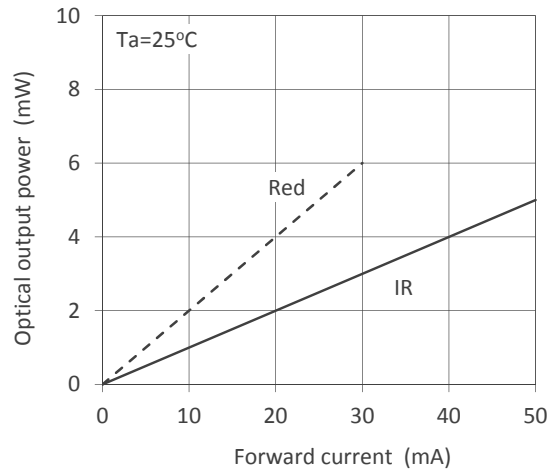
Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward voltage	Infrared	-	1.2	1.4	V	$I_F=20mA$
	Red		1.7	2.0		
Reverse current	I_R	-	-	10	μA	$V_R=6V$
Optical output power	Infrared	-	2.0	-	mW	$I_F=20mA$
	Red		4.0			
Peak emission wavelength	Infrared	-	940	-	nm	$I_F=20mA$
	Red		660			
Spectral bandwidth at 50%	Infrared	-	50	-	nm	$I_F=20mA$
	Red		20			
Half angle	Infrared	-	21	-	deg.	
	Red		38			

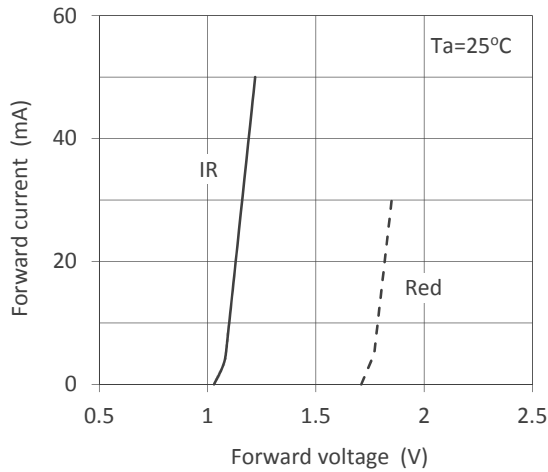
Allowable Forward Current-Ambient Temperature



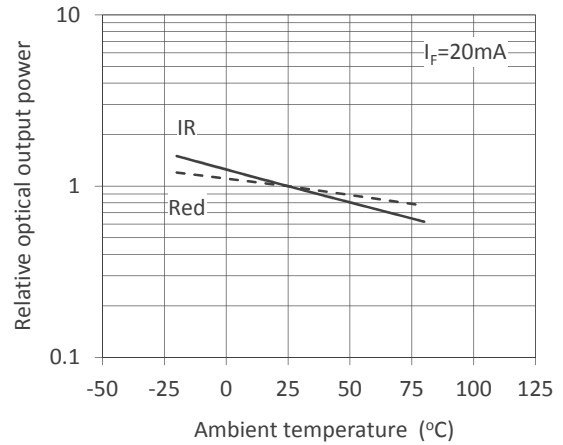
Optical Output Power - Forward Current



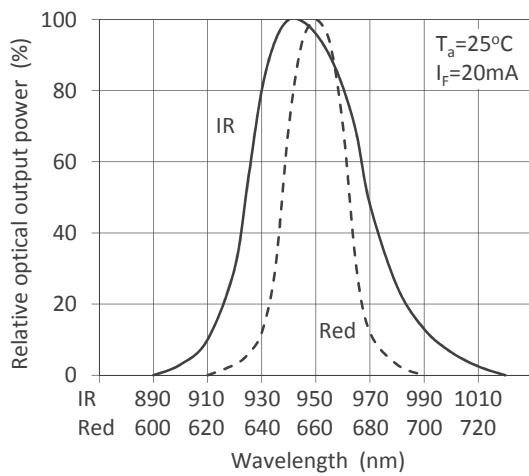
Forward Current - Forward Voltage



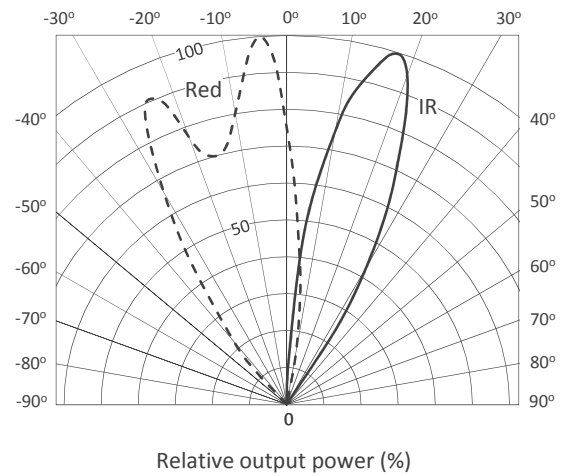
Relative Optical Output Power - Ambient Temperature



Spectral Distribution



Directivity



- Specifications , characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

Opto-technologies for the Future



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