

## Device Selection Guide

Device No.	Chip Material	Lens Color
IR	GaAlAs	Water clear
PT	Silicon	Water clear

## Absolute Maximum Ratings (Ta=25°C)

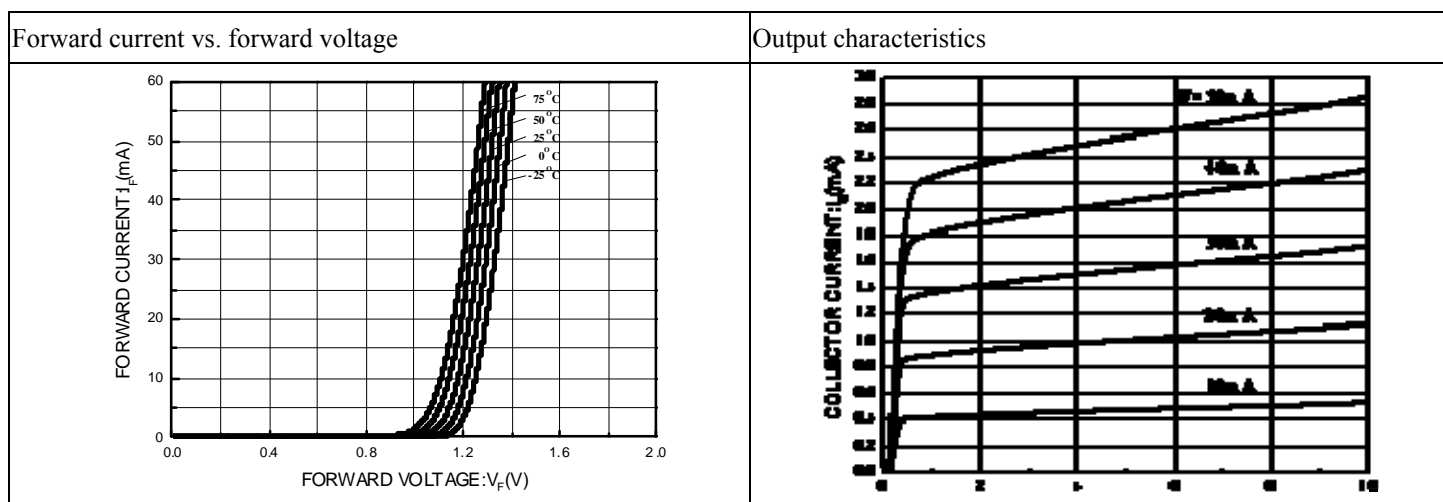
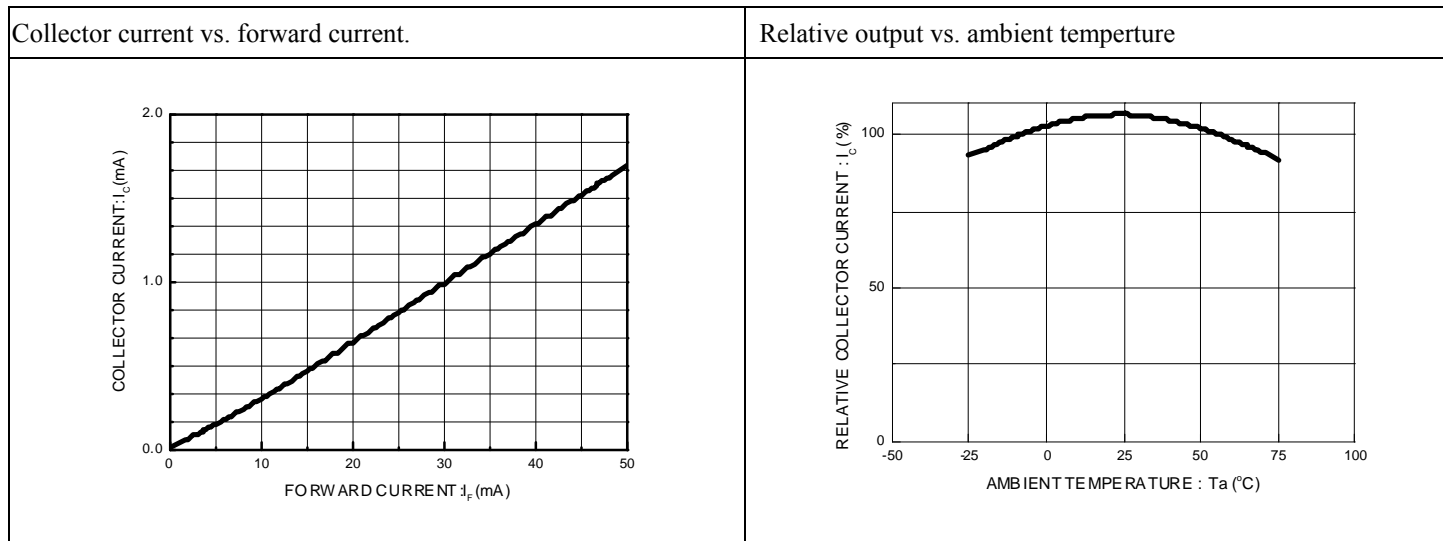
Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at(or below) 25°C Free Air Temperature	Pd	75	mW
	Reverse Voltage	V <sub>R</sub>	5	V
	Forward Current	I <sub>F</sub>	30	mA
	Peak Forward Current (*1) Pulse width ≤100μs, Duty cycle=1%	I <sub>FP</sub>	1	A
Output	Collector Power Dissipation	P <sub>C</sub>	75	mW
	Collector Current	I <sub>C</sub>	20	mA
	Collector-Emitter Voltage	B V <sub>CEO</sub>	35	V
	Emitter-Collector Voltage	B V <sub>ECO</sub>	5	V
Operating Temperature		Topr	-30~+85	°C
Storage Temperature		Tstg	-40~+100	°C
Lead Soldering Temperature (*2) (1/16 inch form body for 5 seconds)		Tsol	260	°C

Notes: (\*1)  $t_w=100\ \mu\text{sec.}$ ,  $T=10\ \text{msec.}$  (\*2)  $t=10\ \text{Sec}$

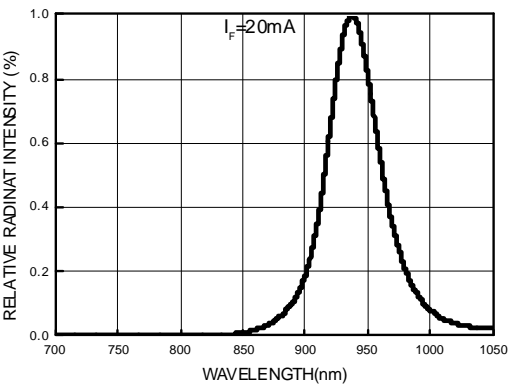
**Electro-Optical Characteristics (Ta=25°C)**

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Input	Forward Voltage	$V_F$	1.00	1.18	1.4	V	$I_F=10\text{mA}$
	Reverse Current	$I_R$	---	---	10	$\mu\text{A}$	$V_R=5\text{V}$
	Peak Wavelength	$\lambda_p$	---	940	---	nm	$I_F=10\text{mA}$
Output	Dark C urrent	$I_{CEO}$	---	---	100	nA	$V_{CE}=25\text{V}$
	C-E Saturation Voltage	$V_{CE}(\text{sat})$	---	---	0.4	V	$I_C=0.25\text{mA}$ $I_F=20\text{mA}$
Transfer Characteristics	Collect Current	$I_C(\text{ON})$	0.25	---	1.0	mA	$V_{CE}=5\text{V}$ $I_F=10\text{mA}$
		$I_C(\text{OFF})$	---	---	20	$\mu\text{A}$	
	Rise time	$t_r$	---	15	50	$\mu\text{sec}$	$V_{CE}=5\text{V}$ $I_C=1\text{mA}$ $R_L=1\text{K}\Omega$
	Fall time	$t_f$	---	15	50	$\mu\text{sec}$	

## Typical Electrical/Optical/Characteristics Curves for ITR



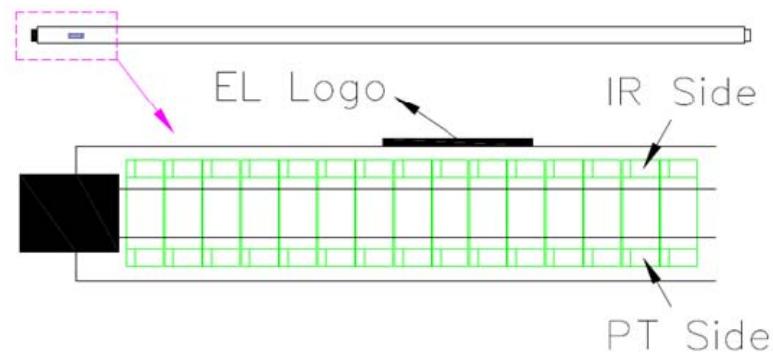
Spectral Distribution



Technical drawing of the 2N2000 transistor showing three views: top, front, and side. The top view shows a rectangular package with a central circular feature and four pins labeled 1, 2, 3, and 4. Dimensions include 2.6, 7.5, 5, 6.3, 3.4±0.3, 0.7, and 0.5. The front view shows the package profile with dimensions 7.5, 5, 6.3, 1.3, 0.15, and 0.4. The side view shows the package profile with dimensions 2.6, 0.5, and 0.4. A legend identifies the pins: 1: Anode, 2: Cathode, 3: Collector, 4: Emitter. A note indicates a maximum height of 1.3mm for the central feature.

- 1.All dimensions are in millimeters
- 2.Tolerances unless dimensions  $\pm 0.2\text{mm}$
- 3.Lead spacing is measured where the lead emerge from the package
- 4.Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification
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- 6.When using this product , please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. EVERIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.

**Packing Spec.:**



**Packing Quantity Specification**

1. 180pcs/1 Tube
2. 30Tube(5.4Kpcs)/1 Box
3. 12Boxes(64.8Kpcs)/1Carton

**Label Form Specification**

	<b>EVERLIGHT</b>	
CPN : P/N : XXXXXXXXX		
ITR1203DT50A/TB		
QTY : 	CAT : HUE : REF :	
LOT NO : 		
Reference : 		
<b>MADE IN CHINA</b>		

- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

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