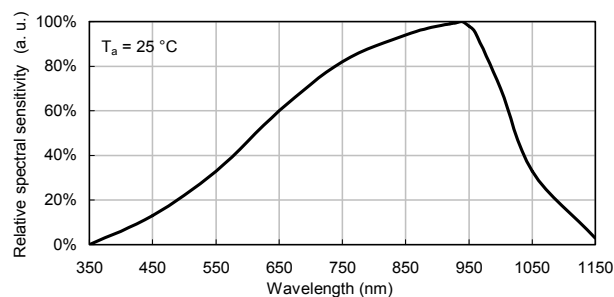
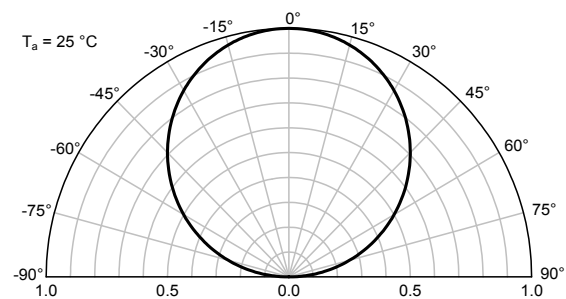


Phototransistor

ELECTRICAL / OPTICAL CHARACTERISTICS at $T_A=25^{\circ}\text{C}$

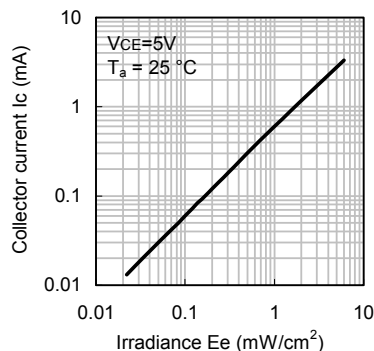
Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Collector-to-Emitter Breakdown Voltage	$V_{BR\ CE0}$	30	-	-	V	$I_C = 100\mu\text{A}$ $E_e = 0\text{mW}/\text{cm}^2$
Emitter-to-Collector Breakdown Voltage	$V_{BR\ ECO}$	5	-	-	V	$I_E = 100\mu\text{A}$ $E_e = 0\text{mW}/\text{cm}^2$
Collector-to-Emitter Saturation Voltage	$V_{CE\ (SAT)}$	-	-	0.8	V	$I_C = 2\text{mA}$ $E_e = 20\text{mW}/\text{cm}^2$
Collector Dark Current	I_{CEO}	-	-	100	nA	$V_{CE} = 10\text{V}$ $E_e = 0\text{mW}/\text{cm}^2$
Rise Time(10% to 90%)	T_R	-	15	-	μS	$V_{CE} = 5\text{V}$ $I_C = 1\text{mA}$ $R_L = 1000\Omega$
Fall Time(90% to 10%)	T_F	-	15	-	μS	
On State Collector Current	$I_{(ON)}$	0.35	0.6	-	mA	$V_{CE} = 5\text{V}$ $E_e = 1\text{mW}/\text{cm}^2$ $\lambda = 940\text{nm}$
Range of spectral bandwidth	$\lambda_{0.1}$	420	-	1120	nm	-
Wavelength of peak Sensitivity	λ_p	-	940	-	nm	-
Angle of half sensitivity	$2\theta_{1/2}$	-	120	-	deg	-

TECHNICAL DATA**RELATIVE SPECTRAL SENSITIVITY vs. WAVELENGTH****RELATIVE RADIANT SENSITIVITY vs. ANGULAR DISPLACEMENT**

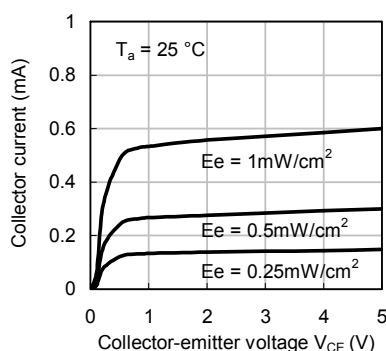
TECHNICAL DATA

PHOTOTRANSISTOR

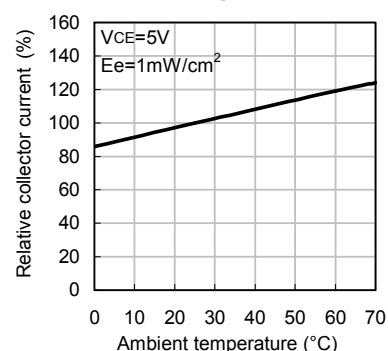
Collector Current vs. Irradiance



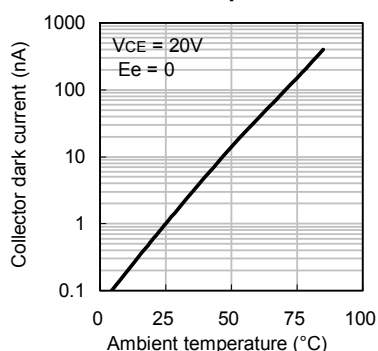
Collector Current vs. Collector-Emitter Voltage



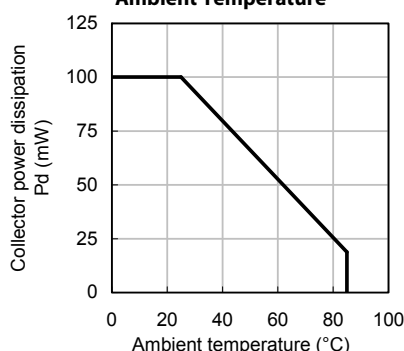
Relative Collector Current vs. Ambient Temperature



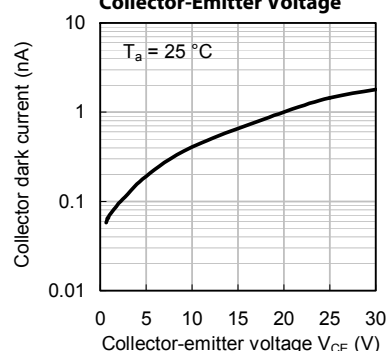
Collector Dark Current vs. Ambient Temperature



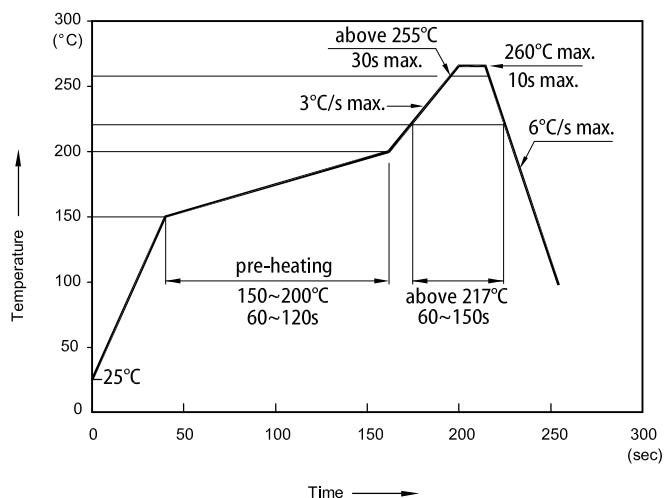
Collector Power Dissipation vs. Ambient Temperature



Collector Dark Current vs. Collector-Emitter Voltage

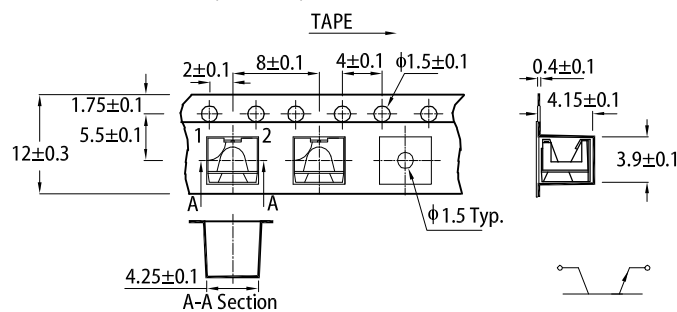


REFLOW SOLDERING PROFILE for LEAD-FREE SMD PROCESS

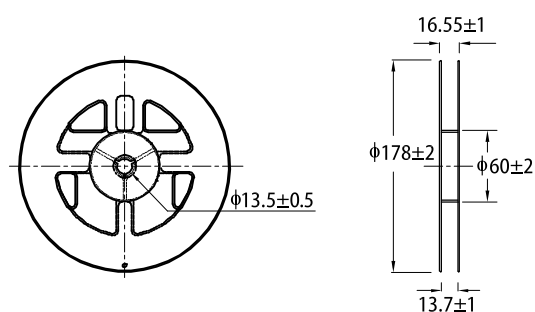


- Notes:
1. Don't cause stress to the LEDs while it is exposed to high temperature.
 2. The maximum number of reflow soldering passes is 2 times.
 3. Reflow soldering is recommended. Other soldering methods are not recommended as they might cause damage to the product.

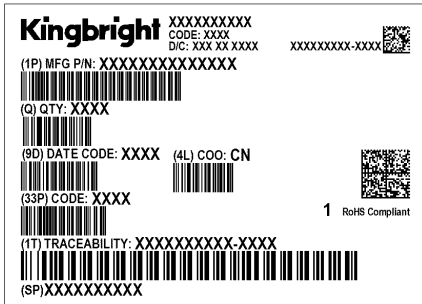
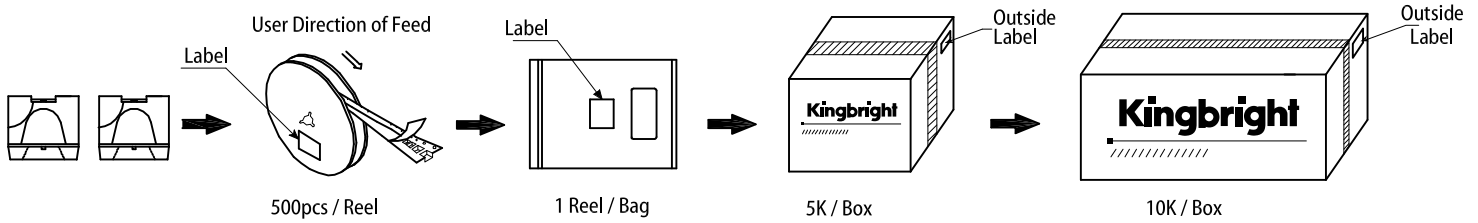
TAPE SPECIFICATIONS (units : mm)



REEL DIMENSION (units : mm)



PACKING & LABEL SPECIFICATIONS



PRECAUTIONARY NOTES

1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
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