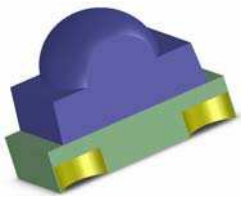
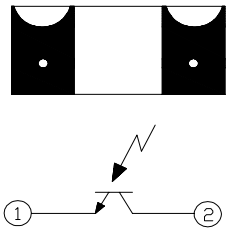
Photo Transistor

KST-0315A

Description

The KST-0315A is a high-sensitivity & surface mount type silicon phototransistor. It's ideal for various kinds of optical transistor such as touch panels for C/D, ATM, Car navigation system and even AV Instrument and various types of disk driver.





Pin Connection
1. Emitter
2. Collector

RoHS

Features

- Compact and thin package
- SMD type
- Reflow soldering
- RoHS & High reliability package

Applications

- Touch screen for ATM
- Touch screen for Car navigation system
- Touch screen for FA equipment
- AV instrument
- Various types of disk driver

Absolute Maximum Ratings

[T_A = 25℃]

Parameter	Symbol	Min.	Max.	Max.
Collector-Emitter Voltage	V_{CEO}	-	35	V
Emitter-Collector Voltage	V_{ECO}	-	6	V
Collector Current	I_C	-	20	mA
Collector Power Dissipation	P_C	-	75	mW
Operating Temperature	Topr.	-20	85	℃
Storage Temperature	Tstg.	-30	85	℃
Soldering Temperature*1	Tsol	-	260	℃

*1 : MAX 10s

KST-0315A

Electrical Characteristics

[T_A = 25℃]

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Dark Current	I_{CEO}	Ev=0, V_{CE}=20V	-	1.0	100	nA
Collector Current	I_C	Ev=1000lx, V_{CE}=5V	4.0	6.0	-	mA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	Ev=1000lx, I_C=0.8mA	-	0.15	0.4	V
Spectral Sensitivity	λ	-	700	-	1050	nm
Peak Sensitivity Wavelength	$λ_P$	-	-	880	-	nm
Collector-Emitter Breakdown Voltage	BVCEO	Ev=0, I_{CE}=0.1mA	35	90	-	V
Emitter-Collector Breakdown Voltage	BVECO	Ev=0, I_{EC}=0.01mA	6	7.5	-	V
Half Angle	Δθ	-	-	±15	-	deg

Ordering Information

Part Number	Packaging Type	Quantity
KST-0315A	Tape and Reel	3,000

Package Outline Dimensions

(Unit : mm)