

PHOTO-DIODE

ST201

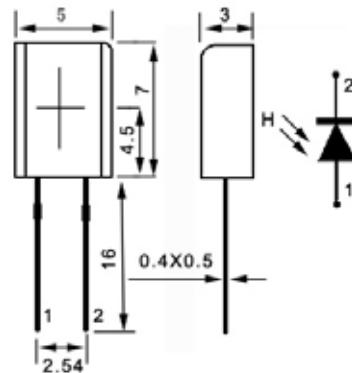
ST201

General:

ST201 is designed for the infrared remote controller and other optosensors. It has high sensitivity, less dark current, fast response times and filter visible light package. Combined with the GaAs, GaAlAs series infrared emitting diode, it is widely used as receive device in the area of data transmission, photo-switches, televisions, airconditioner,VTRs and home appliance.

Package Dimensions

Unit: mm



Absolute Maximum Ratings (Ta=25 °C)

Parament	Symbol	Rating	Unit
Reverse Current	VR	35	V
Forward Current	IF	100	mA
Power Dissipation Ta=25 Decrement when temp. is above 25	PD	150 3.3	mW mW/
Operating temperature	T _{opr}	-30 ~ +70	
* Soldering temperature	T _{sol}	260	

*Soldering time: 5s max. Soldering position: at least 1.5mm from the base of the lead wires.

Electro-Optical Characteristics(Ta=25 °C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Dark Current	V _R =10V , H=0	I _D	-	-	50	nA
Total Capacitance	f=1MHz , V=0	C _t	-	90	-	pF
Wavelength of Peak Sensitivity		p	-	940	-	nm
Reverse Light Current	=940nm, V _R =5V H=5mW/cm , C _T =2870 ° K	I _L	-	50	-	uA
Short-Circuit Current	H=5mW/cm, C _T =2870 ° K	I _{sc}	40		-	uA
Open-Circuit Voltage	H=5mW/cm, C _T =2870 ° K	V _{oc}	-	0.3	-	V
Rise Time	V _R =10V, R _L =1K	T _{on}	-	50	-	nS
Fall Time	V _R =10V, R _L =1K	T _{off}	-	50	-	nS