



Ambient light sensor EN301DIC

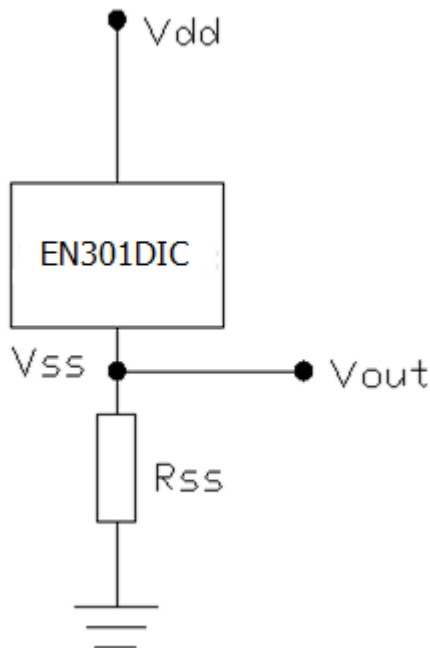
Features:

- Special filter epoxy encapsulation;
- Special response characteristics similar to the human eyes;
- Linear output with light changes;
- Have certain temperature stability;
- Low dark current, low intensity of illumination.

Typical Applications:

- Direct replacement of CdS LDR;
- Adjust background light, such as PDA, television, Cameras, LCD/LED displays and mobile phones, etc.;
- Electronic toys and lighting equipment

Structure Diagram: (unit:mm)



VDD:Positive

VSS:Negative



Ultimate parameters: $T_a=25^{\circ}\text{C}$:

parameters	符号	Rating	Unit
Positive Breakdown Voltage	Vdd	70	V
Reverse Breakdown Voltage	-Vdd	7	V
Max. Power	PD	100	mW
Working Temperature	Topr	-25~+70	$^{\circ}\text{C}$
Storage Temperature	Tstg	-25~+80	$^{\circ}\text{C}$
Welding Temperature (5")	Tsol	260	$^{\circ}\text{C}$

※1 welding at the place 4mm away from the gel, and welding time is no more than 5 seconds.

Electrical Optical Characteristics $T_a=25^{\circ}\text{C}$:

Parameters		Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Light Current	EN301DIC	IC (Vdd=5V Rss=1k)	Vdd=5V, Ev= 10Lux		90		μA
			Vdd=5V, Ev= 20Lux		155		
			Vdd=5V, Ev= 100Lux		515		
Dark Current		Idrk	Vdd=5V, Ee= 0 ※2			10	nA
Spectrum		λ		480~1050			nm
Saturation Voltage		Vdd-Vss			0.3		V
Rise Time		tr	Vdd=5V, Rss=1k		3.2		μS
Fall time		tf			4.8		μS

※ 2 Ev ,Ee are got in the condition of white LED light.



■ 光谱响应曲线图:

人眼函数·普通硅光器件·照度传感器光谱曲线对照

