

CYT101D current ripple elimination chip



General Description

CYT101D is an LED chip that eliminates 100Hz/120Hz current ripple. The chip has a built-in 90V power MOSFET, and adjusts the current of the VC port by detecting the voltage of the OUT port to adjust the operating state of the built-in power MOSFET, the LED current ripple into the voltage ripple of the OUT port, so that the current and voltage of the LED lamp series remain constant. Through CYT101D combined with constant current control circuit, effectively eliminate the output current ripple, and the no stroboscopic LED constant current scheme is realized.

Electric Characteristics

Unless otherwise stated, $T_A=25^{\circ}\text{C}$.

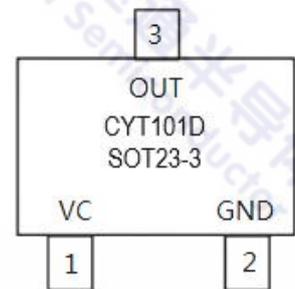
Symbol	Description	Condition	Min	Typ	Max	Unit
I_{ST}	Starting current	-	-	1	-	μA
V_{REF}	OUT port reference voltage	-	-	5.7	-	V
I_{OUT}	OUT port current	-	-	-	30	mA
R_{DS_ON}	On-impedance of power MOSFET	-	-	6	-	Ω
BV_{DS}	Breakdown voltage of power MOSFET	-	90	-	-	V

Absolute Maximum Ratings

Unless otherwise stated, $T_A=25^{\circ}\text{C}$.

Symbol	Description	Range	Unit
V_{OUT}	OUT port voltage	-0.5~90	V
V_{VC}	VC port voltage	-0.5~8	V
$R_{\theta JA}$	PN junction to ambient thermal resistance	210	$^{\circ}\text{C}/\text{W}$
P_D	Power Dissipation	0.35	W
T_{OPT}	Operating temperature	-40~150	$^{\circ}\text{C}$
T_{STG}	Storage temperature	-55~150	$^{\circ}\text{C}$
V_{ESD}	HBM ESD	2	kV

Pin Diagram (top view)



Typical Application

