

CYT1000AT single segment LED linear constant current control chip



General Description

CYT1000AT is an linear constant current IC, the output current is adjustable, high precision of constant current, and the output current don't change with the voltage of chip OUT port, with better constant current performance. Simple application scheme, Cost and Resistance capacitance step-down are comparable, with over-temperature protection function, safer and more reliable.

Electric Characteristics

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

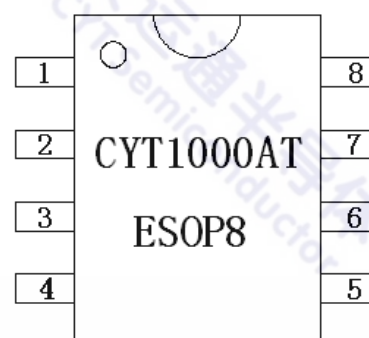
Symbol	Description	Condition	Min.	Typ.	Max.	Unit
$V_{OUT-MIN}$	OUT input voltage	$I_{OUT}=30\text{mA}$	6.5	-	-	V
V_{OUT}	OUT port withstand voltage	$I_{OUT}=0\text{mA}$	700	-	-	V
I_{OUT}	Output current	-	5	-	60	mA
I_{DD}	Quiescent current	$V_{OUT}=10\text{V}$, CS hanging	-	0.16	0.25	mA
V_{CS}	CS port voltage	$V_{OUT}=10\text{V}$	-	0.6	-	V
D_{IOUT}	I_{OUT} error	$I_{OUT}=5\text{mA} \sim 100\text{mA}$	-	± 5	-	%
T_{SC}	temperature compensation point	-	-	140	-	$^{\circ}\text{C}$

Absolute Maximum Ratings

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

Symbol	Description	Range	Unit
V_{OUT}	OUT port voltage	-0.5~700	V
I_{OUT}	OUT port current	5~60	mA
$R_{\theta JA}$	The thermal resistance from PN junction to environment	65	$^{\circ}\text{C}/\text{W}$
P_D	Power consumption	1.25	$^{\circ}\text{C}$
T_{OPT}	Operating temperature	-40~140	$^{\circ}\text{C}$
T_{STG}	Storage temperature range	-50~150	$^{\circ}\text{C}$
V_{ESD}	HBM ESD	2	kV

Pin Diagram(top view)



Typical Application

