

CYT1000AE single segment LED linear constant current control chip



General Description

CYT1000AE is a linear constant current IC with adjustable output current, high constant-current accuracy, 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, $T_A=25^{\circ}\text{C}$.

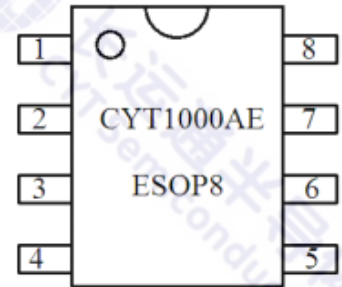
Symbol	Description	Condition	Min.	Typ.	Max.	Unit
$V_{OUT-MIN}$	OUT input voltage	$I_{OUT}=30\text{mA}$	6.5	-	-	V
V_{OUT}	OUT port withstand voltage	$I_{OUT}=0\text{mA}$	500	-	-	V
I_{OUT}	Output current	$V_{OUT}=10\text{V}\sim 40\text{V}$	5	-	60	mA
I_{DD}	Quiescent current	$V_{OUT}=10\text{V}$, REXT hanging	-	0.08	0.16	mA
V_{REXT}	REXT port voltage	$V_{OUT}=10\text{V}$	-	0.6	-	V
D_{IOUT}	I_{OUT} error	$I_{OUT}=5\text{mA}\sim 60\text{mA}$	-	± 5	-	%
T_{SC}	temperature compensation point	-	-	120	-	$^{\circ}\text{C}$

Absolute Maximum Ratings

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

Symbol	Description	Range	Unit
V_{OUT}	OUT port voltage	-0.5~500	V
$I_{OUT-MAX}$	I_{OUT} transient saturation current	100	mA
T_{OPT}	Operating temperature	-40~120	$^{\circ}\text{C}$
T_{STG}	Storage temperature range	-50~150	$^{\circ}\text{C}$
V_{ESD}	HBM ESD	2	kV

Pin Diagram(top view)



Typical Application

