



ULF0291

Preliminary

CMOS IC

6 SEGMENTS LINEAR LED DRIVER

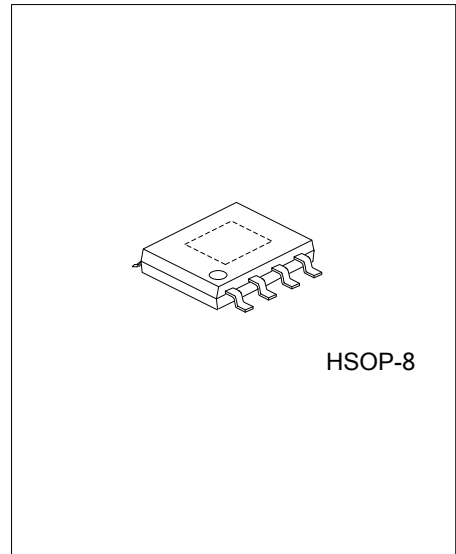
DESCRIPTION

The UTC **ULF0291** is a 6-segments linear LED driver with little flash.

The UTC **ULF0291** is suitable for LED lighting.

FEATURES

- 6-segments
- Little flash
- Low static current consumption

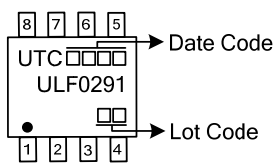


ORDERING INFORMATION

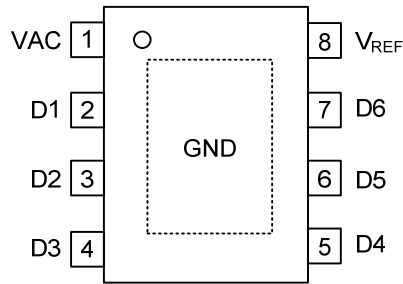
Ordering Number	Package	Packing
ULF0291G-SH2-R	HSOP-8	Tape Reel

<p>ULF0291G-SH2-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) SH2: HSOP-8 (3) G: Halogen Free and Lead Free
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MARKING



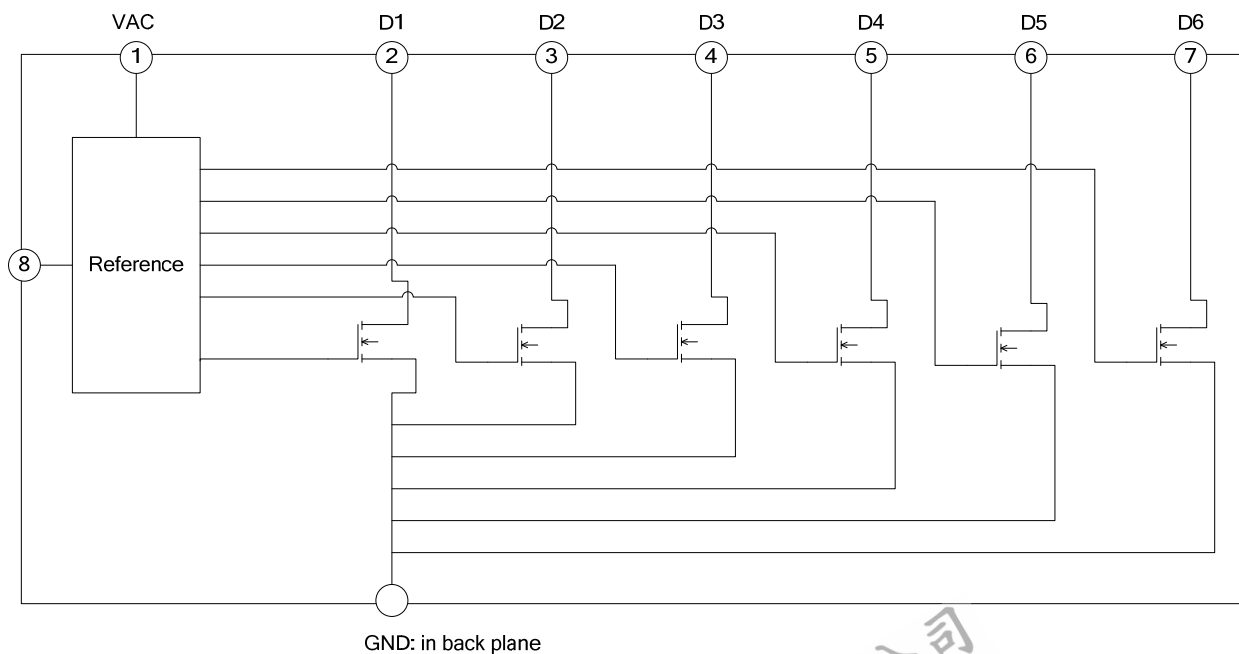
■ PIN CONFIGURATION



■ PIN DESCRIPTION

Pin No	Pin Name	Function Description
1	VAC	Power input
2	D1	Current output port 1
3	D2	Current output port 2
4	D3	Current output port 3
5	D4	Current output port 4
6	D5	Current output port 5
7	D6	Current output port 6
8	V _{REF}	Reference voltage setting current of each port
Back plane	GND	GND is the ground connect port

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
VAC, D1, D2, D3, D4, D5, D6	V_{MAX}	500	V
VREF	V_{MAX}	-0.3 ~ 10	V
Power Dissipation	P_D	1.25	W
Junction Temperature	T_J	-40 ~ +125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +125	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

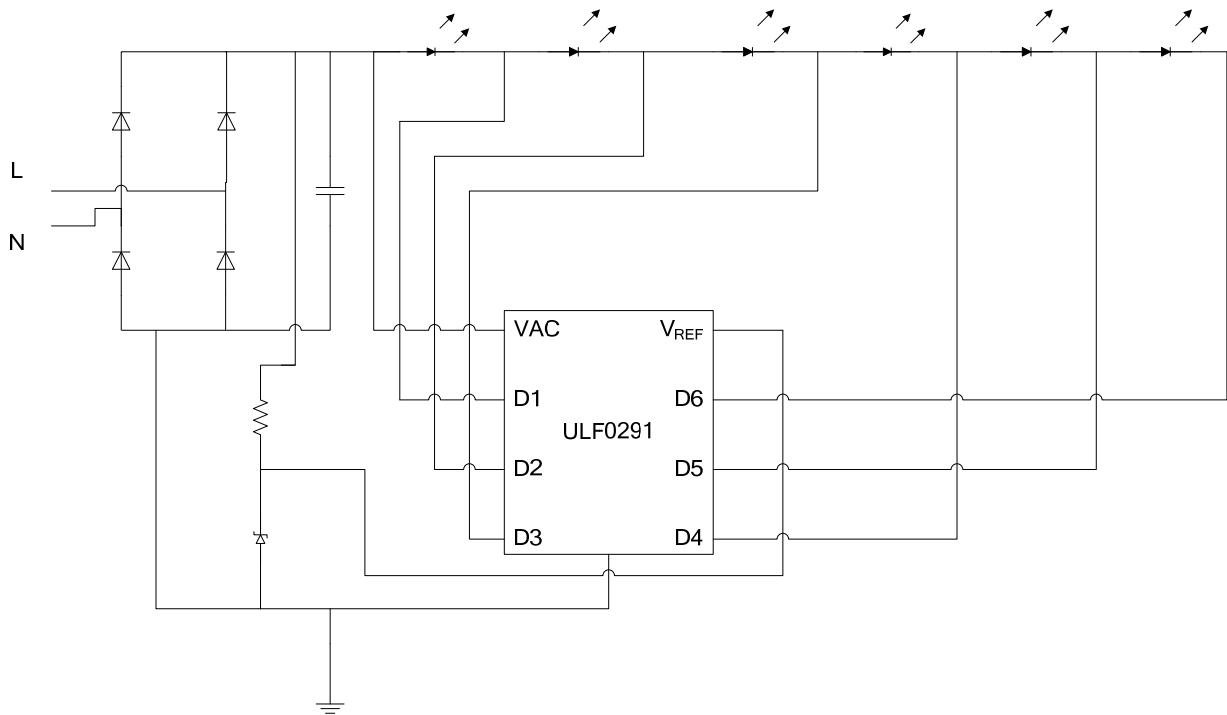
■ THERMAL RESISTANCES CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	100	$^{\circ}\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS ($T_J=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	VAC	For 220V application		220	260	V
Static Current	I_{CC}	VAC=40V, $V_{\text{REF}}=6\text{V}$		0.1	0.2	mA
Driving Current	ID1	$V_{\text{REF}}=6\text{V}$		18		mA
Driving Current	ID2-ID6	$V_{\text{REF}}=6\text{V}$		36		mA
Leakage Current	I_{leak}	For High Voltage MOS			0.1	μA
Over Voltage Protection	V_{OVP}	Voltage in D6	100	120	140	V
Response Time	T_{OVP}	$V_{\text{REF}}=6\text{V}$			0.1	μs
Temp Coeff. Of Current	T_C			-0.3		$\%/^{\circ}\text{C}$
Current at Switching Point	I_{SW}			10		mA

■ TYPICAL APPLICATION CIRCUIT



Application circuit

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