



New Product Announcement

AP8803

Cost effective 3W LED driver for consumer applications

Description

The AP8803 is a step-down DC/DC converter designed to drive LEDs with a constant current.

The device can drive up to 7 LEDs, depending on the forward voltage of the LEDs, in series from a voltage source of 8V to 30V. Series connection of the LEDs provides identical LED currents resulting in uniform brightness and eliminating the need for ballast resistors.

The AP8803 switches at frequency up to 700kHz. This allows the use of small size external components. The TSOT23-5 package and coupled with it requiring only 4 external components produces a small solution footprint. The accuracy, temperature range and cost make it ideally suited to cost sensitive domestic lighting application.

It is available in green mold compound as standard



The Diodes advantage

The AP3154A and AP3156 provide a simple cost effective solution for small screen LCD backlighting

- **Small footprint TSOT23-5**
High power density

- **Drives multiple 3W LED**
Cost sensitive solution to MR16 lamps

- **PWM and DC dimming**
Versatile dimming; DC for thermal control, PWM for brightness control

- **High switching frequency up to 700kHz**
Small inductance value and size

- **Green mold compound (No Br, Sb) and Pb-free RoHS compliant finish**
Better for environment; no mercury unlike CFL.

Circuit functions

- **3W LED driving**
- **General illumination applications**
- **MR 16 lighting applications**
- **12VAC lighting applications**



New Product Announcement

AP8803

Cost effective 3W LED driver for consumer applications

Diodes Medium voltage High brightness LED Drivers

Part Number	Min. Input Voltage	Max. Input Voltage	Max. Output Voltage	Typ Peak Output Current	LED current accuracy	Switching Frequency (max)	Efficiency	Operating temperature range	Quiescent Current (typ)	Standby Quiescent Current (typ)	Package Outline
	V	V	V	A	%	kHz	%	°C	mA	µA	
ZXLD1362	6	60	60	1	5	1000	95	-40 to 125	-	65	TSOT23-5
ZXLD1366	6	60	60	1	3	500	95	-40 to 125	-	65	TSOT23-5, DFN3030-6
ZXLD1356	6	60	60	0.55	3	1000	97	-40 to 125	-	65	TSOT23-5, DFN3030-6
AP8802	8	48	48	1	7	500	92	-40 to 105	-	120	SO-8, SO-8-EP, DFN3030-10
AP8801	8	48	48	0.5	7	500	92	-40 to 105	-	120	SO-8, MSOP-8,
ZXLD1360	7	30	30	1	5	1000	95	-40 to 125	-	20	TSOT23-5
AP8803	8	30	30	1	8	700	92	-40 to 105	1.8	-	TSOT23-5
ZXLD1350	7	30	30	0.35	5	1000	95	-40 to 105	-	15	TSOT23-5
ZXLD1352	7	30	30	0.35	5	1000	97	-40 to 105	-	20	TSOT23-5
AP8800	8	28	28	0.35	7	600	92	-40 to 85	-	30	SO-8, MSOP-8, DFN3030-10

To find out more information:

Web page <http://www.diodes.com/products/catalog/list.php?parent-id=91>

Datasheet <http://www.diodes.com/datasheets/AP8803.pdf>

Ordering information

Device	Packaging	Pack mark	Reel size	Tape width	Quantity
AP8803WTG-7	TSOT23-5	AYYW	7"	8mm	3000

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1)

Notes:1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex

Notes

Codes for date coding on part marks

Y Year 0~9 W A~Z week 1~26 a~z week 27~53