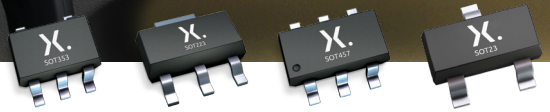


Constant current LED Drivers

Cost-efficient, reliable and easy to use



Nexperia's linear constant current LED drivers are a simple yet robust solution to power LEDs up to 250 mA – covering a majority of key applications in the growing LED market. The AEC-Q101 qualified NCR devices are easy-to-use, reliable and cost efficient with availability in a number of package options.

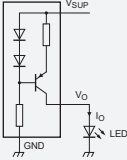

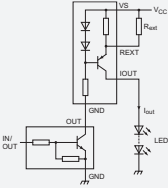

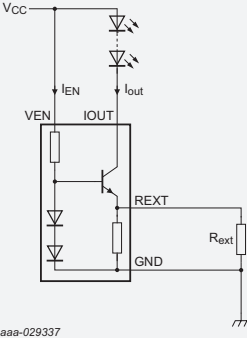






Features

- › High current accuracy
- › Parallel drivers can be used to increase the current capability
- › High power capability (up to 1250 mW) for increased robustness
- › Supply voltage up to 75 V
- › AEC-Q101 qualified
- › $T_j = 150^\circ\text{C}$
- › Space-saving and future-proof
- › Leadless package option with side-wettable flanks for automatic optical inspection (AOI)
- › Easy to implement
- › Multi-sourcing capable

Applications

- › Constant current source
- › General & Industrial Lighting
- › Consumer Electronics
- › Automotive interior and exterior lighting
 - Door handles
 - Dashboard
 - Number plate light
 - Indicators
 - Rear lights, etc.

Product range

Configuration	Current (mA)	Supply Voltage (V)	Enable	Ptot (mW)	Package	Size (mm)	Type
PNP (High side)  006aaa025	10	18	GND	480	 SOT23	2.9 x 1.3 x 1.0	NCR401T
	20						NCR402T
PNP (High side)  aaa-019594	10 – 65	40	GND	750	 SOT457	2.9 x 1.5 x 1.0	NCR401U
	20 – 65						NCR402U
	50 – 65	NCR405U					
NPN (Low Side)  aaa-029337	10 – 250	16	Vcc	750	 DFN2020D-6	2.0 x 2.0 x 0.65	NCR320PAS
	10 – 250	40	Logic				NCR321PAS
	10 – 250	40	Logic				NCR420PAS
	10 – 250	16	750	Vcc	 SOT457	2.9 x 1.5 x 1.0	NCR421PAS
	10 – 250	16		Logic			NCR320U
	10 – 150	40	1250	Vcc	 SOT223	6.5 x 3.5 x 1.65	NCR321U
	10 – 150	40		Logic			NCR420U
	10 – 250	16	1250	Vcc	 SOT223	6.5 x 3.5 x 1.65	NCR421U
	10 – 250	16		Logic			NCR320Z
	10 – 150	40	1250	Vcc	 SOT223	6.5 x 3.5 x 1.65	NCR321Z
	10 – 150	40		Logic			NCR420Z
	10 – 150	40	1250	Vcc	 SOT223	6.5 x 3.5 x 1.65	NCR421Z
10 – 150	40	Logic		NCR422Z			

Product specs and datasheets available at: www.nexperia.com/led-driver

© 2019 Nexperia B.V.

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release:
August 2019