LM2793 Evaluation Board

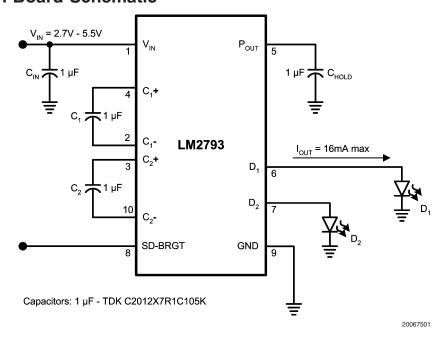
National Semiconductor Application Note 1278 Karl Schlossstein March 2004



The LM2793 Evaluation Board may be used to test and evaluate a typical LM2793 application circuit. The layout includes extra large pads for all capacitors and White LEDs (D_1, D_2) to simplify the changing of external components and accomodate different case sizes. The layout of the board is recommended as a guide for end-use board design.

This Board has been pre-configured to deliver 16mA to both constant current outputs when SD-BRGT is connected to $V_{\rm IN}$. Alternatively, LED Current can be adjusted by applying an analog voltage or Pulse-Width Modulated signal to the SD-BRGT pin. For more detail on the LM2793 features and specifications, please refer to the LM2793 Datasheet.

Evaluation Board Schematic



Components

I.C.

Part #	Package Mark I.D.	Package	Dimensions	Current Option
LM2793	L2793	LLP10 (LDA10A)	(L x W x H) 3.0mm x 3.0mm x 0.8mm	16mA

CAPACITORS

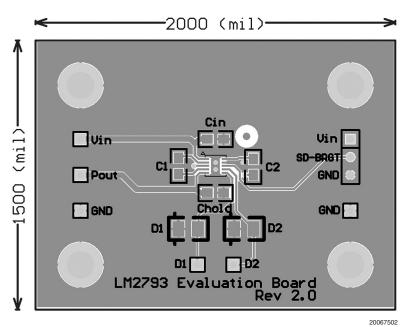
Capacitor Symbol	Value	Case Size	Height	Temperature	Mfr.	Part #
		U.S. (Metric)		Characteristic		
C _{IN}	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C ₁	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C ₂	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C _{HOLD}	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K

MISCELLANEOUS

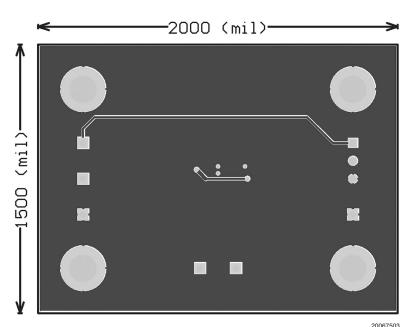
LED Symbol	LED Forward	Case Size	Height	Temperature	Mfr.	Part #
	Voltage			Range		
D ₁ , D ₂	3.6V	2.1mm x	1.2mm	-40°C to +	OSRAM	LW M67C
		1.3mm		100°C		

N-1278

Board Layers



Top Layer, Top View



Bottom Layer, Top View (unmirrored)

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