

WEBENCH[®] Thermal Simulation Report

Design : 4049284/5 LMZ35003RKGR LMZ35003RKGR 10.0V-15.0V to 5.00V @ 0.5A

Operating Condition

Name	Value
VIN_OP	15.0V
IOUT_OP	0.5A

Ambient Temperature

Name	Temperature
Ambient_plus_Z	30.0
Ambient_minus_Z	30.0

Air Flow

Name	Direction	
Flow_Type	Convection	
Flow_Rate	0.0LFM	
Flow_Direction	Top to Bottom	

Edge Temperature

Name	Temperature	Thermal Type
Edge_plus_X (Right)		Insulated
Edge_minus_X (Left)		Insulated
Edge_plus_Y (Top)		Insulated
Edge_minus_Y (Bottom)		Insulated

BOM

Component Name(s)	Part Number	Max Temp	Power Dissipation	Manufacture	Properties	Qty	Price	Footprint
pcb_bottom		68°C						
Cin	GRM32ER61E226KE15L	60°C	0.00W	MuRata	VDC=25.0V ESR=0.002Ohm IRMS=3.67A Cap=2.2E-5F	1	\$0.16	1210 14.7 mm ²
Cout	6SVPE220MW	57°C	0.003W	Panasonic	VDC=6.3V ESR=0.015Ohm IRMS=3.15A Cap=2.2E-4F	1	\$0.14	CAPSMT_62_E61 53.29 mm ²
U1	LMZ35003RKGR	77°C		Texas Instruments		1	\$7.95	•
pcb_top		79°C						RKG0041A 143.0 mm ²

VinMin = 10.0V

VinMax = 15.0V

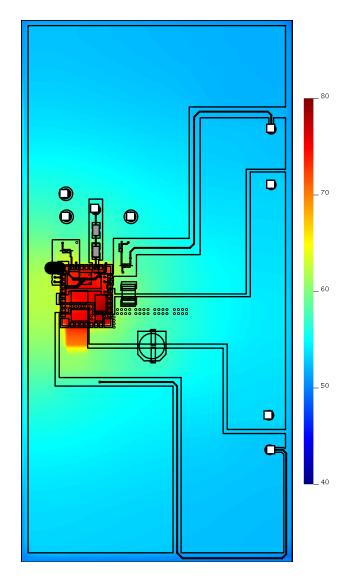
Vout = 5.0V

lout = 0.5A

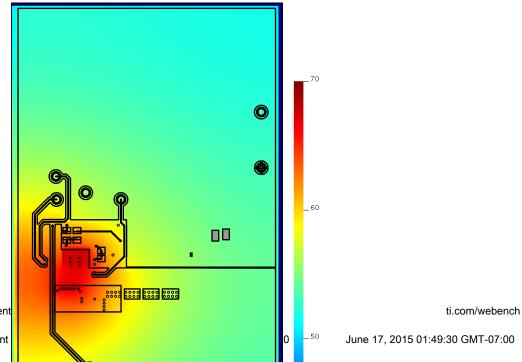
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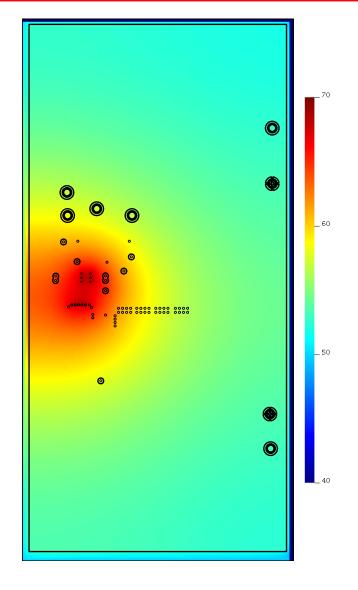
Thermal Images



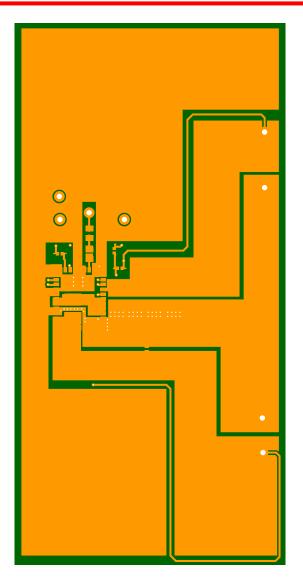
Thermal Top Image



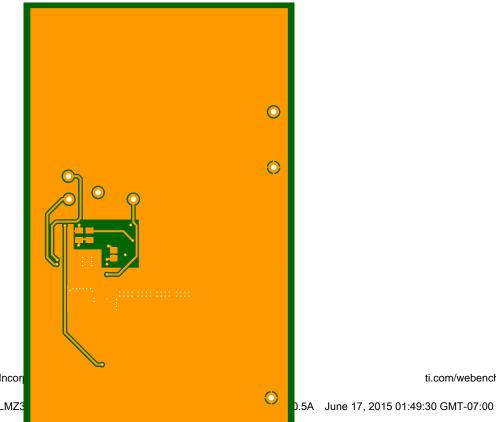
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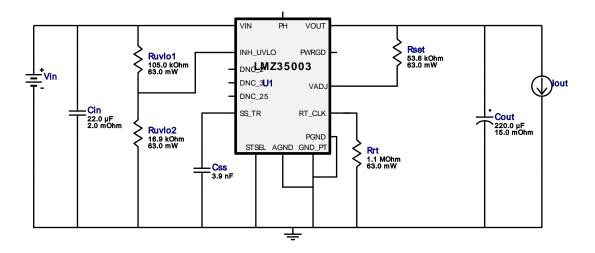


Top Image



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Schematic



Design Assistance

1. LMZ35003 Product Folder : http://www.ti.com/product/LMZ35003 : contains the data sheet and other resources.

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