

TCR3RM12A

New Product

Low Dropout (LDO) Linear Voltage Regulator

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Application Note

Basics of Low-Dropout (LDO) Regulator ICs[Jun,2020]

PDF: 1259KB

Application Note

Mechanism of LDO Oscillation and Reducing the Susceptibility to Oscillation[Mar,2020]

PDF: 1397KB

Application Note

Improving the Load Transient Response of LDOs[Jul,2019]

PDF: 1119KB

Application Note

Simple Guide to Improving Ripple Rejection Ratio of LDO Regulators[Jul,2019]

PDF: 1066KB

Description

Package Information

Absolute Maximum Ratings

Electrical Characteristics

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Inquiry

Related Links

Notes

Description

Application	Mobile equipment / IOT/Wearable equipment / Camera/Sensor power supply / RF power supply / Audio power supply
Feature	High ripple rejection ratio / Low quiescent current / Fast load transient response / Low output noise voltage / Small package
Output Type	Fixed Output
Overcurrent protection	Y
Thermal shutdown	Y
Auto-discharge	Y
Inrush current reduction	Y
RoHS Compatible Product(s) (#)	Available
Assembly bases	Japan

Package Information

Toshiba Package Name	DFN4C
Pins	4

Please refer to the link destination to check the detailed size.

Absolute Maximum Ratings

Characteristics	Symbol	Rating	Unit
Input Voltage	V _{IN}	6.0	V

Power Dissipation (mounted on glass-epoxy board(40mm×40mm))	P _D	420	mW
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Electrical Characteristics

Characteristics	Symbol	Condition	Value	Unit
Operating Output Current (Max)	I _{OUT}	-	300	mA
Operating Input Voltage *	V _{IN}	-	1.8 to 5.5	V
Output Voltage (Typ.)	V _{OUT}	-	1.2	V
Output Voltage Lineup	V _{OUT}	-	0.9 to 4.5	V
Output Voltage Accuracy (±) *	-	-	2.0	%
Quiescent Current (Typ.) *	I _{B(ON)}	I _{OUT} =0mA	7	μA
Stand-by Current (Typ.) *	I _{B(OFF)}	-	0.1	μA
Dropout Voltage (Typ.) *	V _{DO}	I _{OUT} =0.3A	130	mV
Ripple Rejection Ratio (Typ.) *	R.R.	f=1kHz	100	dB
Output Noise Voltage (Typ.) *	V _{NO}	-	5	μVrms
Operating Temperature	T _{opr}	-	-40 to 85	°C
Output Capacitance	C _{OUT}	-	≥1.0	μF

*: Representative value, Please refer to the datasheet for details.

Document

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Name	Date
Application Note ☐ Basics of Low-Dropout (LDO) Regulator ICs  PDF: 1259KB	Jun,2020
Application Note ☐ Mechanism of LDO Oscillation and Reducing the Susceptibility to Oscillation  PDF: 1397KB	Mar,2020
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Application Note ☐ Simple Guide to Improving Ripple Rejection Ratio of LDO Regulators  PDF: 1066KB	Jul,2019
Application Note ☐ Power Efficiency Optimization and Application Circuits Using Dual-power-supply LDO Regulators  PDF: 915KB	Mar,2019
Application Note ☐ Thermal Design to Maximize the Performance of LDO Regulators  PDF: 914KB	Mar,2019
Application Note ☐ LDO Regulators Glossary  PDF: 449KB	Jan,2019
Catalog ☐ Power Management  PDF: 1179KB	May,2015

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Technical inquiry

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[→ Part Naming Conventions](#)

Notes

The Part Number column shows representative part numbers only, which may not be available for sale in the precise form shown. Each Part Number constitutes a product family which may contain multiple associated product configurations.

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