300mA Ultra Low Dropout Linear Regulator

FEATURES

- Ultra Low Dropout Voltage
- Compatible with low ESR MLCC as Input / Output Capacitor
- Good Line and Load Regulation
- Guaranteed Output Current of 300mA
- Available in SOT23-5L Package
- Fixed Output: 1.0V, 1.2V, 1.5V, 1.8V, 2.5V, and 3.3V
- Output Auto Discharge Function
- Over-Temperature/Over-Current Protection
- -40 °C to 125 °C Junction Temperature Range

APPLICATION

- LCD TVs and SETTOP Boxes
- Battery Powered Equipment
- Motherboards and Graphic Cards
- Microprocessor Power Supplies
- Peripheral Cards
- High Efficiency Linear Regulators
- Battery Chargers

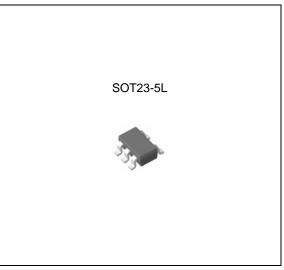
DESCRIPTION

The TJ4303 series of high performance ultra-low dropout linear regulators operates from 2.5V to 6.0V input supply and provides ultra-low dropout voltage, high output current with low ground current. Wide range of preset output voltage options are available. These ultra-low dropout linear regulators respond fast to step changes in load which makes them suitable for low voltage micro-processor applications. The TJ4303 is developed on a CMOS process technology which allows low quiescent current operation independent of output load current. This CMOS process also allows the TJ4303 to operate under extremely low dropout conditions.

ABSOLUTE MAXIMUM RATINGS (Note 1)

CHARACTERISTIC	SYMBOL	MIN.	MAX.	UNIT
Input Supply Voltage (Survival)	VIN	-	6.5	V
Maximum Output Current	IMAX	-	300	mA
Lead Temperature (Soldering, 5 sec)	T _{SOL}		260	°C
Storage Temperature Range	T _{STG}	-65	150	°C
Operating Junction Temperature Range	T _{JOPR}	-40	125	°C
Package Thermal Resistance *	⊖JA-SOT23-5L	265		°C/W
	θ _{JC-SOT23-5L}	130		°C/W
Maximum Power Dissipation	PD(MAX-SOT23-5L)	0.377		W

* Calculated from package in still air, mounted to 2.6mm X 3.5mm(minimum foot print) 2 layer PCB without thermal vias per JESD51 standards



ORDERING INFORMATION

Device	Package	
TJ4303GSF5-ADJ		
TJ4303GSF5-X.X	50123-5L	
TJ4303GSF5-X.X	SOT23-5	

X.X = Output Voltage = 1.0, 1.2, 1.5, 1.8, 2.5, and 3.3

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TJ4303

Please contact us for more information about this product.