

**FEATURES**

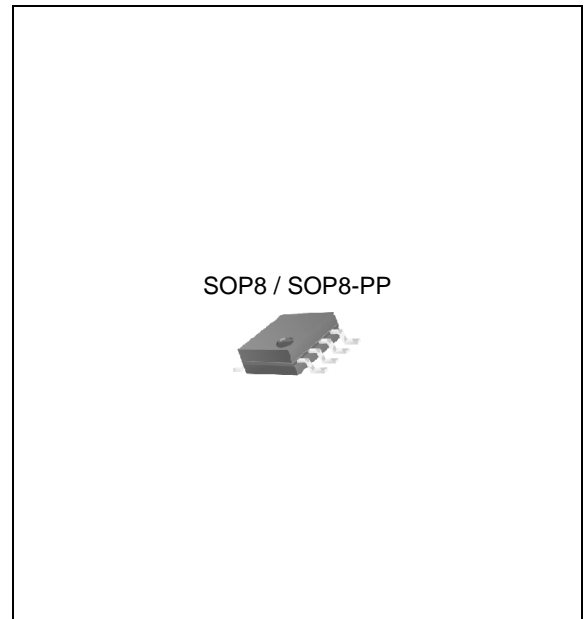
- Dual Channel Ultra Low Dropout Voltage
- Compatible with low ESR MLCC as Input / Output Capacitor
- Good Line and Load Regulation
- Guaranteed Output Current of 600/600mA
- Available in SOP8, SOP8-PP
- Fixed Output Voltage: 1.0V ~ 3.3V
- Over-Temperature Protection
- Over-Current Protection

**APPLICATION**

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

**DESCRIPTION**

The TJ5641 of two channels high performance ultra-low dropout linear regulators operates from 2.5V to 5.5V input supply and provides ultra-low dropout voltage with low ground current. These ultra-low dropout linear regulators respond fast to step changes in load which makes them suitable for low voltage micro-processor applications. The TJ5641 is developed on a CMOS process technology which allows low quiescent current operation independent of output load current. This CMOS process also allows the TJ5641 to operate under extremely low dropout conditions.

**ORDERING INFORMATION**

Device	Package
TJ5641GD-XXYY	SOP8
TJ5641HGD-XXYY	
TJ5641GDP-XXYY	SOP8-PP
TJ5641HGDP-XXYY	

XX : Output Voltage code of channel 1 (VOUT1)

YY : Output Voltage code of channel 2 (VOUT2)

**ABSOLUTE MAXIMUM RATINGS**

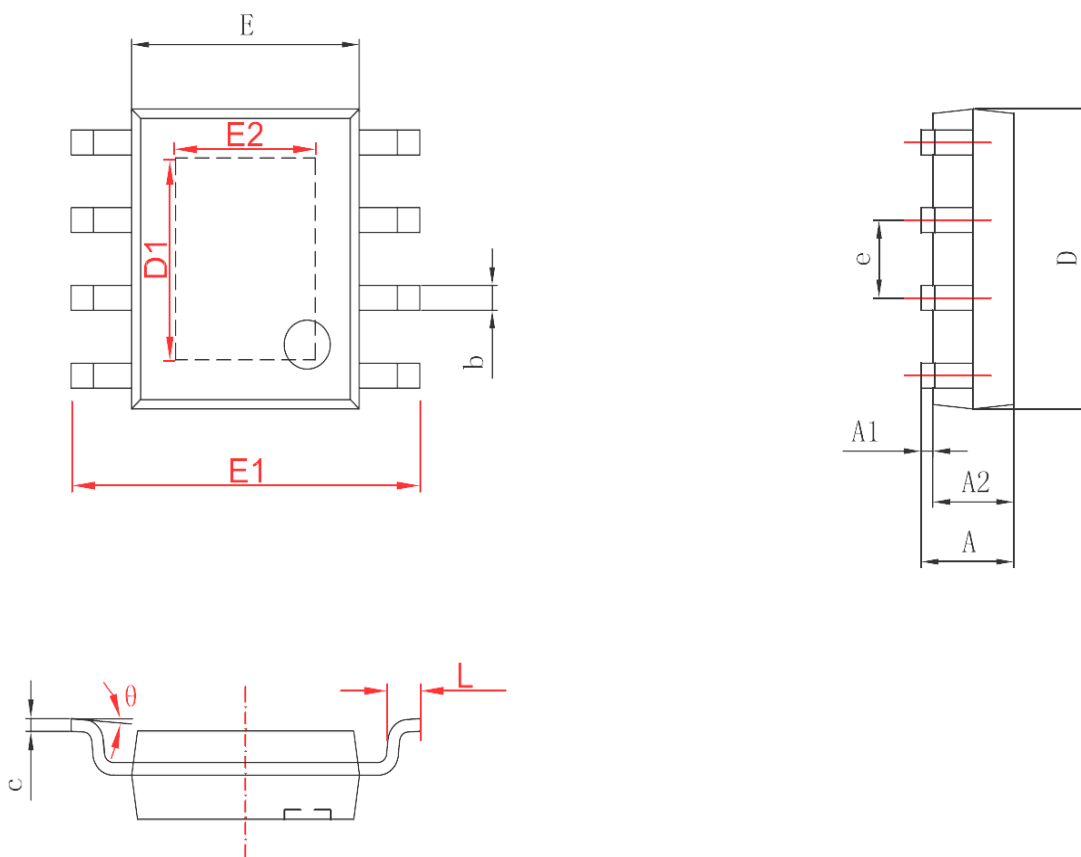
CHARACTERISTIC	SYMBOL	MIN.	MAX.	UNIT
Input Supply Voltage (Survival)	$V_{IN1}, V_{IN2}$	-	6.5	V
Enable Input Voltage (Survival)	$V_{EN1}, V_{EN2}$	-	6.5	V
Maximum Continuous Output Current	$I_{MAX}$	-	600/600	mA
Lead Temperature	$T_{SOL}$		260	°C
Storage Temperature Range	$T_{STG}$	-65	150	°C
Operating Junction Temperature Range	$T_{JOPR}$	-40	125	°C
Package Thermal Resistance *	$\Theta_{JA-SOP8-PP}$	68		°C/W
	$\Theta_{JC-SOP8-PP}$	15		

\* 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.

Please contact us for more information about this product.

## Package Dimension

### SOP-8 & SOP-8PP



SYMBOL	Dimension In Millimeters		Dimension In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1 (for SOP-8)	0.100	0.250	0.004	0.010
A1 (for SOP-8PP)	0.050	0.150	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
D1 (for SOP-8PP)	3.202	3.402	0.126	0.134
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
E2 (for SOP-8PP)	2.313	2.513	0.091	0.099
e	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
$\theta$	0°	8°		