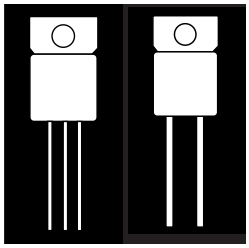
Preliminary Data Sheet

OM7659ST OM7661ST
OM7660ST

VOLTAGE CONVERTER IN AN ISOLATED HERMETIC PACKAGE



Voltage Converter, 1 Amp, 5V To 3.0V, 3.3V Or Adjustable Output

FEATURES

- Hermetic Package, Isolated Substrate
- Mil-Spec Temperature Range
- External Compensating Components Not Required
- Drops 5V To 3.0V, 3.3V, Adjustable
- 1.0 Amp Output
- Available Hi-Rel Screened

DESCRIPTION

These voltage converters are both fixed output voltage and adjustable. They operate with a regulated 5V input and drop the input to 3.0V or 3.3V over at output current range from 10mA to 1.0A. The fixed voltage output devices are two terminal devices and the adjustable version is a three terminal device which permits output voltage trimming.

3.3

ABSOLUTE MAXIMUM RATINGS @ 25°C

Power Dissipation (P_d) . . . . . 2 W
Continuous Current . . . . . 1 A
Operating and Storage Temperature Range . . . . . - 55°C to + 150° C
Thermal Resistance, R_{qJC}, Junction-to-Case, Typical . . . . . 5° C/W
Lead Soldering Temperature, 10 second time limit . . . . . 260° C

ELECTRICAL CHARACTERISTICS

Part No.	Symbol	Test Conditions			Test Limits			
		V_{IN}	I_O	T_J	Min.	Typ.	Max.	Units
OM7659ST	V_O	5V	500mA	25°C	2.90	3.00	3.10	V
			10mA to 1A	-55°C to 125°C	2.80		3.20	
OM7660ST			500mA	25°C	3.20	3.30	3.40	
			10mA to 1A	-55°C to 125°C	3.10		3.50	
OM7661ST	V_{REF}		500mA	25°C	1.20	1.25	1.30	
			10mA to 1A	-55°C to 125°C	1.10		1.40	
All	$REG_{(LOAD)}$		10mA to 1A	25°C		0.5	1.15	$\%V_O$
	T_C[1]		500mA	25 to 125°C		0.005	0.01	$\%V_O$/°C

Note: 1. Temperature Coefficient

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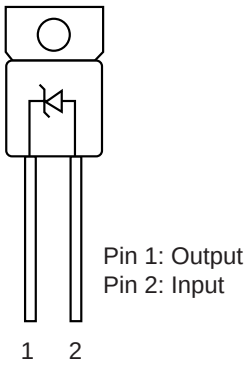
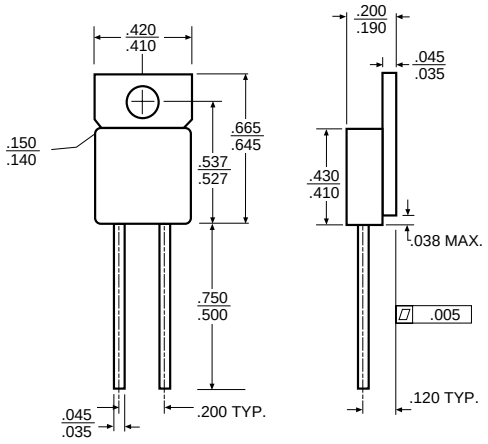
Pin Connection



Mechanical Outline



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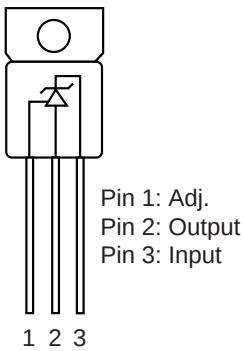

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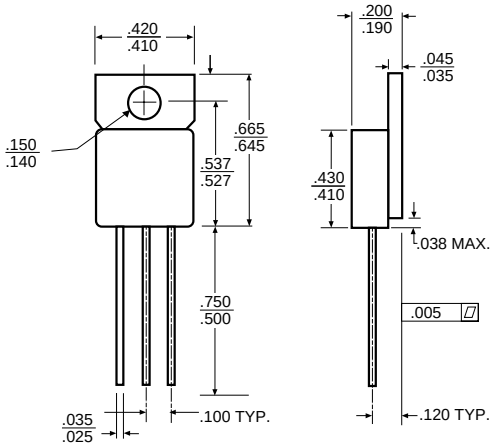
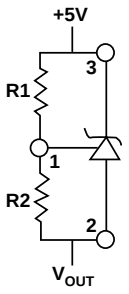


Adjusting



$V_{DROP} = V_{REF}(1+R1/R2)$

$V_{OUT} = V_{IN} - V_{DROP}$

$R1 + R2 \leq \frac{V_{DROP}}{300\mu A}$

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