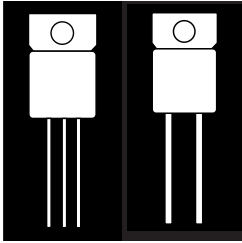


Preliminary Data Sheet

OM7659ST
OM7660ST

OM7661ST

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 an 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.

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, $R_{\theta JC}$, Junction-to-Case, Typical	5° C/W
Lead Soldering Temperature, 10 second time limit	260° C

3.3

OM7659ST - OM7661ST

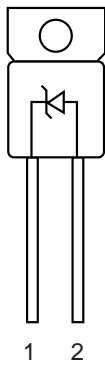
ELECTRICAL CHARACTERISTICS

Part No.	Symbol	Test Conditions			Test Limits			Units
		V _{IN}	I _o	T _J	Min.	Typ.	Max.	
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

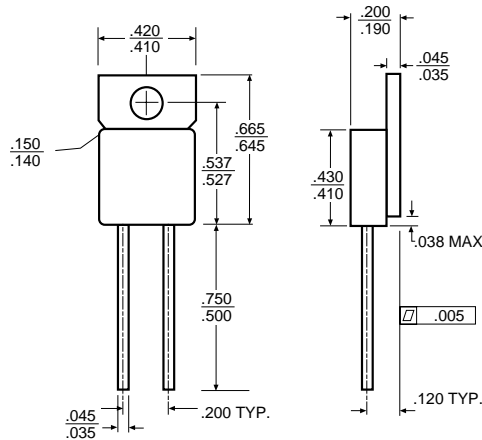
OM7659ST/OM7660ST

Pin Connection



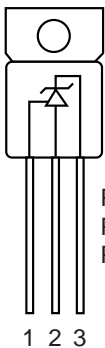
Pin 1: Output
Pin 2: Input

Mechanical Outline



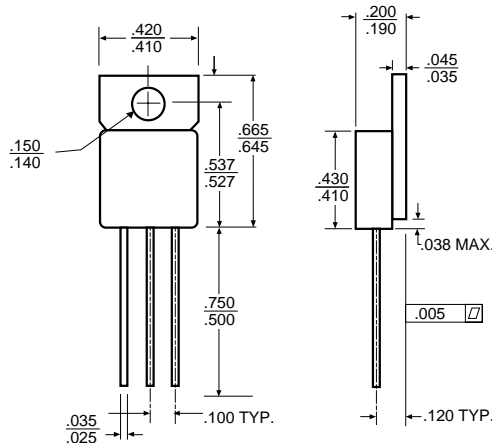
OM7661ST

Pin Connection

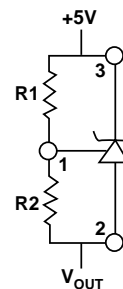


Pin 1: Adj.
Pin 2: Output
Pin 3: Input

Mechanical Outline



Adjusting



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

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

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