

## DESC APPROVED LOW DROPOUT NEGATIVE



**Three Terminal, Fixed Voltage,  
Low Dropout Negative Voltage Regulator  
In Hermetic Packages**

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**FEATURES**

- Approved To DES C Standardized Military Drawings
- Low Dropout Voltage,  $0.6\text{ V} @ I_o = 1\text{ A}$
- Output Current in Excess of 1 A [LCC 20 (N2) package limited to 0.3A]
- Reverse Battery Protection
- Internal Short Circuit Protection
- Isolated and Non-Isolated Hermetic Package Types
- Output Voltages: - 5V, -5.2V, -12V, & -15V

**DESCRIPTION**

The OM2990 series of fixed voltage regulators are designed to provide up to 1.5A with high efficiency. It has the ability to source 1A of output current with a typical dropout voltage of 0.6V and a maximum of 1V over the entire operating temperature range. It is supplied in hermetic packages and is ideally suited for all applications where small size and high reliability are required.

**ABSOLUTE MAXIMUM RATINGS,  $T_C = 25^\circ\text{C}$** 

Input Voltage . . . . .	-26 V to +0.3V
Output Voltage . . . . .	-5V, -5.2V, -12V, -15V dc
Operating Junction Temperature Range . . . . .	-55°C to +125°C
Storage Temperature Range . . . . .	-65°C to +150°C
Lead Temperature (Soldering 10 seconds) . . . . .	300°C
Thermal Resistance: Junction to Case	
Case 2, LCC20 . . . . .	15.5°C/W
Case U&M, TO-257 (isolated) & SMD-3 . . . . .	3.8°C/W
Case T&N, TO-257 (non-isolated) & SMD-1 . . . . .	3.0°C/W
Case Y, TO-3 . . . . .	2.7°C/W
Maximum Output Current	
Case 2 . . . . .	.3A
Case U&M . . . . .	1A
Case T, N & Y . . . . .	1.5A

APPROVED DESC DRAWING	OMNIREL P/N
5962-9571101MUA	OM2990 - 5 STM
5962-9571002MUA	OM2990 - 5.2 STM
5962-9571001MUA	OM2990 - 12 STM

**ELECTRICAL CHARACTERISTICS, OM2990-5NK, NM, NT (-5 VOLTS)**  
 Test Conditions are -55°C T<sub>A</sub>, 125°C, V<sub>IN</sub> = -10V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 1.0 A	1 2	-5.10 -5.25	-4.90 -4.75	V
Quiescent Current	I <sub>Q</sub>	I <sub>O</sub> ≤ 1.0A	1 2		5 12	mA
		I <sub>O</sub> = 1.0A, V <sub>IN</sub> = -5 V	1,2		50	
Line Regulation	V <sub>RLN</sub>	-6 V V <sub>IN</sub> -26 V, I <sub>OUT</sub> = 5 mA	1 2		±40 ±50	mV
		50 mA I <sub>OUT</sub> 1.0 A	1 2		±50 ±100	
Load Regulation	V <sub>RLD</sub>	I <sub>O</sub> = 0.1 A DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 1.0 A DV <sub>O</sub> 100 mV	1 2		1	
Output Noise Voltage	V <sub>ON</sub>	I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		750	μV
Short Circuit Current	I <sub>SS</sub>	R <sub>L</sub> = 1	1 2	1.5 1.3		A
Maximum Output Current	I <sub>MAX</sub>		1	1.5		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	50		dB

Notes: 1. T<sub>A</sub> = 25°C.

2. Over full operating temperature range.

3. Guaranteed, not tested.

**ELECTRICAL CHARACTERISTICS, OM2990-12NK, NM, NT (-12 VOLTS)**  
 Test Conditions are -55°C T<sub>A</sub>, 125°C, V<sub>IN</sub> = -17V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 1.0A	1 2	-12.24 -12.60	-11.76 -11.40	V
Quiescent Current	I <sub>Q</sub>	I <sub>O</sub> ≤ 1.0A	1 2		5 12	mA
		I <sub>O</sub> = 1A, V <sub>IN</sub> = -12 V	1,2		50	
Line Regulation	V <sub>RLN</sub>	-13 V V <sub>IN</sub> -26 V I <sub>OUT</sub> = 5 mA	1 2		±65 ±80	mV
		50 mA I <sub>OUT</sub> 1.0 A	1 2		±80 ±120	
Dropout Voltage	V <sub>DO</sub>	I <sub>O</sub> = 0.1 A DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 1 A DV <sub>O</sub> 100 mV	1 2		1	
Output Noise Voltage	V <sub>ON</sub>	I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		1500	μV
Short Circuit Current	I <sub>SS</sub>	R <sub>L</sub> = 1	1 2	.90 .75		A
Maximum Output Current	I <sub>MAX</sub>		1 4	1.4		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	42		dB

Notes: 1. T<sub>A</sub> = 25°C.

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting.

The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

**ELECTRICAL CHARACTERISTICS, OM2990-15NK, NM, NT (-15 VOLTS)**  
 Test Conditions are -55°C T<sub>A</sub>, 125°C, V<sub>IN</sub> = -20V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 1.0A	1 2	-15.30 -15.75	-14.70 -14.25	V
Quiescent Current	I <sub>Q</sub>	I <sub>O</sub> ≤ 1.0A	1 2		15 20	mA
		I <sub>O</sub> = 1.0A, V <sub>IN</sub> = -15 V	1,2		50	
Line Regulation	V <sub>RLN</sub>	-16 V V <sub>IN</sub> -26 V, I <sub>OUT</sub> = 5 mA	1 2		±75 ±120	mV
		50 mA I <sub>OUT</sub> 1.0 A	1 2		±120 ±190	
Dropout Voltage	V <sub>DO</sub>	I <sub>O</sub> = 0.1 A DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 1.0 A DV <sub>O</sub> 100 mV	1 2		1	
Output Noise Voltage	V <sub>ON</sub>	I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		1800	μV
Short Circuit Current	I <sub>SS</sub>	R <sub>L</sub> = 1	1 2	.75 .62		A
Maximum Output Current	I <sub>MAX</sub>		1 4	1.4		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	42		dB

Notes: 1. T<sub>A</sub> = 25°C.

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting.  
 The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

**ELECTRICAL CHARACTERISTICS, OM2990-5SM, ST (-5 VOLTS)**  
 Test Conditions are  $-55^{\circ}\text{C}$   $T_A$ ,  $125^{\circ}\text{C}$ ,  $V_{\text{IN}} = -10\text{V}$ ,  $C_{\text{OUT}} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{\text{OUT}}$	$5\text{ mA} \leq I_{\text{L}} \leq 1.0\text{ A}$	1 2	-5.10 -5.25	-4.90 -4.75	V
Quiescent Current	$I_{\text{Q}}$	$I_{\text{L}} \leq 1.0\text{ A}$	1 2		5 12	mA
		$I_{\text{L}} = 1.0\text{ A}, V_{\text{IN}} = -5\text{ V}$	1,2		50	
Line Regulation	$V_{\text{RLN}}$	$-6\text{ V} \leq V_{\text{IN}} \leq -26\text{ V}, I_{\text{OUT}} = 5\text{ mA}$	1 2		$\pm 45$ $\pm 55$	mV
		$V_{\text{RLN}} = -6\text{ V}$	1,2		$\pm 70$ $\pm 110$	
Load Regulation	$V_{\text{RLD}}$	$50\text{ mA} \leq I_{\text{OUT}} \leq 1.0\text{ A}$	1 2		$\pm 70$ $\pm 110$	mV
Dropout Voltage	$V_{\text{DO}}$	$I_{\text{L}} = 0.1\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		3	V
		$I_{\text{L}} = 1.0\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		1	
Output Noise Voltage	$V_{\text{ON}}$	$I_{\text{L}} = 5\text{ mA}, 10\text{ Hz} - 100\text{ kHz}$	3		750	µV
Short Circuit Current	$I_{\text{LS}}$	$R_{\text{L}} = 1$	1,2	1.27		A
Maximum Output Current	$I_{\text{MAX}}$			1.27		A
Ripple Rejection	$R_{\text{R}}$	$V_{\text{ripple}} = 1\text{ V}_{\text{ms}}$ $I_{\text{OUT}} = 5\text{ mA}, f = 1\text{ kHz}$	1	50		dB

Notes: 1.  $T_A = 25^{\circ}\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

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**ELECTRICAL CHARACTERISTICS, OM2990-12SM, ST (-12 VOLTS)**

Test Conditions are  $-55^{\circ}\text{C} \leq T_A \leq 125^{\circ}\text{C}$ ,  $V_{\text{IN}} = -17\text{V}$ ,  $C_{\text{OUT}} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{\text{OUT}}$	$5\text{ mA} \leq I_{\text{L}} \leq 1.0\text{ A}$	1 2	-12.24 -12.60	-11.76 -11.40	V
Quiescent Current	$I_{\text{Q}}$	$I_{\text{L}} \leq 1.0\text{ A}$	1 2		5 12	mA
		$I_{\text{L}} = 1.0\text{ A}, V_{\text{IN}} = -12\text{ V}$	1,2		50	
Line Regulation	$V_{\text{RLN}}$	$-13\text{ V} \leq V_{\text{IN}} \leq -26\text{ V}, I_{\text{OUT}} = 5\text{ mA}$	1 2		$\pm 65$ $\pm 80$	mV
		$V_{\text{RLN}} = -13\text{ V}$	1,2		$\pm 80$ $\pm 120$	
Load Regulation	$V_{\text{RLD}}$	$50\text{ mA} \leq I_{\text{OUT}} \leq 1.0\text{ A}$	1 2		$\pm 80$ $\pm 120$	mV
Dropout Voltage	$V_{\text{DO}}$	$I_{\text{L}} = 0.1\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		3	V
		$I_{\text{L}} = 1\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		1	
Output Noise Voltage	$V_{\text{ON}}$	$I_{\text{L}} = 5\text{ mA}, 10\text{ Hz} - 100\text{ kHz}$	3		1500	µV
Short Circuit Current	$I_{\text{LS}}$	$R_{\text{L}} = 1$	1,2	.75		A
Maximum Output Current	$I_{\text{MAX}}$		1 4	1.18		A
Ripple Rejection	$R_{\text{R}}$	$V_{\text{ripple}} = 1\text{ V}_{\text{ms}}$ $I_{\text{OUT}} = 5\text{ mA}, f = 1\text{ kHz}$	1	42		dB

Notes: 1.  $T_A = 25^{\circ}\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting. The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

**ELECTRICAL CHARACTERISTICS, OM2990-15SM, ST (-15 VOLTS)**

Test Conditions are  $-55^{\circ}\text{C} \leq T_A \leq 125^{\circ}\text{C}$ ,  $V_{\text{IN}} = -20\text{V}$ ,  $C_{\text{OUT}} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{\text{OUT}}$	$5\text{ mA} \leq I_{\text{L}} \leq 1.0\text{ A}$	1 2	-15.30 -15.75	-14.70 -14.25	V
Quiescent Current	$I_{\text{Q}}$	$I_{\text{L}} \leq 1.0\text{ A}$	1 2		15 20	mA
		$I_{\text{L}} = 1.0\text{ A}, V_{\text{IN}} = -15\text{ V}$	1,2		50	
Line Regulation	$V_{\text{RLN}}$	$-16\text{ V} \leq V_{\text{IN}} \leq -26\text{ V}, I_{\text{OUT}} = 5\text{ mA}$	1 2		$\pm 75$ $\pm 120$	mV
		$V_{\text{RLN}} = -16\text{ V}$	1,2		$\pm 120$ $\pm 190$	
Load Regulation	$V_{\text{RLD}}$	$50\text{ mA} \leq I_{\text{OUT}} \leq 1.0\text{ A}$	1 2		$\pm 120$ $\pm 190$	mV
Dropout Voltage	$V_{\text{DO}}$	$I_{\text{L}} = 0.1\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		3	V
		$I_{\text{L}} = 1.0\text{ A}$ $DV_{\text{O}} = 100\text{ mV}$	1 2		1	
Output Noise Voltage	$V_{\text{ON}}$	$I_{\text{L}} = 5\text{ mA}, 10\text{ Hz} - 100\text{ kHz}$	3		1800	µV
Short Circuit Current	$I_{\text{LS}}$	$R_{\text{L}} = 1$	1 2	.60 .50		A
Maximum Output Current	$I_{\text{MAX}}$		1 4	1.4		A
Ripple Rejection	$R_{\text{R}}$	$V_{\text{ripple}} = 1\text{ V}_{\text{ms}}$ $I_{\text{OUT}} = 5\text{ mA}, f = 1\text{ kHz}$	1	42		dB

Notes: 1.  $T_A = 25^{\circ}\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting. The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

## ELECTRICAL CHARACTERISTICS, OM2990-5N2 (-5 VOLTS)

Test Conditions are -55°C,  $T_A$ , 125°C,  $V_N = -10V$ ,  $C_{ouc} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{OUT}$	$5\text{ mA} \leq I_o \leq 300\text{ mA}$	1 2	-5.10 -5.25	-4.90 -4.75	V
Quiescent Current	$I_o$	$I_o \leq 300\text{ mA}$	1 2		7 14	mA
		$I_o = 300\text{ mA}, V_N = -5\text{ V}$	1,2		55	
		$-6\text{ V} \quad V_N = -26\text{ V}$ $I_{OUT} = 5\text{ mA}$	1 2		$\pm 45$ $\pm 60$	
Line Regulation	$V_{RLN}$	$50\text{ mA} \quad I_{OUT} = 300\text{ mA}$	1 2		$\pm 80$ $\pm 120$	mV
		$I_o = 100\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		3	
		$I_o = 300\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		1	
Load Regulation	$V_{RLD}$					
Dropout Voltage	$V_{DO}$					
Output Noise Voltage	$V_{ON}$	$I_o = 5\text{ mA},$ $10\text{ Hz} - 100\text{ kHz}$	3		800	µV
Short Circuit Current	$I_{OS}$	$R_L = 1$	1 2	300 250		mA
Maximum Output Current	$I_{MAX}$		1	300		mA
Ripple Rejection	$R_R$	$V_{ripple} = 1\text{ V}_{ms}$ $I_{outp} = 5\text{ mA}, f = 1\text{ kHz}$	1	50		dB

Notes: 1.  $T_A = 25^\circ\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

## ELECTRICAL CHARACTERISTICS, OM2990-12N2 (-12 VOLTS)

Test Conditions are -55°C,  $T_A$ , 125°C,  $V_N = -17V$ ,  $C_{ouc} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{OUT}$	$5\text{ mA} \leq I_o \leq 300\text{ mA}$	1 2	-12.24 -12.60	-11.76 -11.40	V
Quiescent Current	$I_o$	$I_o \leq 300\text{ mA}$	1 2		7 14	mA
		$I_o = 300\text{ mA}, V_N = -12\text{ V}$	1,2		60	
		$-13\text{ V} \quad V_N = -26\text{ V}$ $I_{outp} = 5\text{ mA}$	1 2		$\pm 75$ $\pm 110$	
Line Regulation	$V_{RLN}$	$50\text{ mA} \quad I_{OUT} = 300\text{ mA}$	1 2		$\pm 120$ $\pm 190$	mV
		$I_o = 100\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		3	
		$I_o = 300\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		1	
Load Regulation	$V_{RLD}$					
Dropout Voltage	$V_{DO}$					
Output Noise Voltage	$V_{ON}$	$I_o = 5\text{ mA},$ $10\text{ Hz} - 100\text{ kHz}$	3		1650	µV
Short Circuit Current	$I_{OS}$	$R_L = 1$	1 2	200 175		mA
Maximum Output Current	$I_{MAX}$		1 4	280		mA
Ripple Rejection	$R_R$	$V_{ripple} = 1\text{ V}_{ms}$ $I_{outp} = 5\text{ mA}, f = 1\text{ kHz}$	1	42		dB

Notes: 1.  $T_A = 25^\circ\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting. The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

## ELECTRICAL CHARACTERISTICS, OM2990-15 N2 (-15 VOLTS)

Test Conditions are -55°C,  $T_A$ , 125°C,  $V_N = -20V$ ,  $C_{ouc} = 47\text{ }\mu\text{F}$  (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	$V_{OUT}$	$5\text{ mA} \leq I_o \leq 300\text{ mA}$	1 2	-15.30 -15.75	-14.70 -14.25	V
Quiescent Current	$I_o$	$I_o \leq 300\text{ mA}$	1 2		20 25	mA
		$I_o = 300\text{ mA}, V_N = -15\text{ V}$	1,2		60	
		$-16\text{ V} \quad V_N = -26\text{ V}$ $I_{outp} = 5\text{ mA}$	1 2		$\pm 85$ $\pm 130$	
Line Regulation	$V_{RLN}$	$50\text{ mA} \quad I_{OUT} = 300\text{ mA}$	1 2		$\pm 135$ $\pm 205$	mV
		$I_o = 100\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		3	
		$I_o = 300\text{ mA}$ $DV_o = 100\text{ mV}$	1 2		1	
Load Regulation	$V_{RLD}$					
Dropout Voltage	$V_{DO}$					
Output Noise Voltage	$V_{ON}$	$I_o = 5\text{ mA},$ $10\text{ Hz} - 100\text{ kHz}$	3		1900	µV
Short Circuit Current	$I_{OS}$	$R_L = 1$	1 2	150 140		mA
Maximum Output Current	$I_{MAX}$		1 4	280		mA
Ripple Rejection	$R_R$	$V_{ripple} = 1\text{ V}_{ms}$ $I_{outp} = 5\text{ mA}, f = 1\text{ kHz}$	1	42		dB

Notes: 1.  $T_A = 25^\circ\text{C}$ .

2. Over full operating temperature range.

3. Guaranteed, not tested.

4. The short circuit current is less than the maximum output current due to internal foldback current limiting. The -5V and -5.2V versions do not reach the foldback current limit and therefore conducts a higher short circuit level.

**ELECTRICAL CHARACTERISTICS, OM2990-5.2NK, NM, NT (-5.2 VOLTS)**  
 Test Conditions are -55°C T<sub>A</sub> 125°C, V<sub>IN</sub> = -10.2V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 1.0 A	1 2	-5.30 -5.46	-5.10 -4.94	V
Quiescent Current	I <sub>O</sub>	I <sub>O</sub> ≤ 1.0A	1 2		5 12	mA
		I <sub>O</sub> = 1.0A, V <sub>IN</sub> = -5.2 V	1,2		50	
		-6.2 V V <sub>IN</sub> -26 V, I <sub>OUT</sub> = 5 mA	1 2		±40 ±50	
Line Regulation	V <sub>RLN</sub>	50 mA I <sub>OUT</sub> 1.0 A	1 2		±50 ±100	mV
Load Regulation	V <sub>RLD</sub>	50 mA I <sub>OUT</sub> 1.0 A	1 2		±50 ±100	mV
Dropout Voltage	V <sub>DO</sub>	I <sub>O</sub> = 0.1 A DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 1.0 A DV <sub>O</sub> 100 mV	1 2		1	
		I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		750	μV
Output Noise Voltage	V <sub>ON</sub>	R <sub>L</sub> = 1	1 2	1.5 1.3		A
Short Circuit Current	I <sub>OS</sub>					
Maximum Output Current	I <sub>MAX</sub>		1	1.5		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	50		dB

Notes: 1. T<sub>A</sub> = 25°C.  
 2. Over full operating temperature range.  
 3. Guaranteed, not tested.

**ELECTRICAL CHARACTERISTICS, OM2990-5.2SM, ST (-5.2 VOLTS)**

Test Conditions are -55°C T<sub>A</sub> 125°C, V<sub>IN</sub> = -10.2V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 1.0 A	1 2	-5.30 -5.46	-5.10 -4.94	V
Quiescent Current	I <sub>O</sub>	I <sub>O</sub> ≤ 1.0A	1 2		5 12	mA
		I <sub>O</sub> = 1.0A, V <sub>IN</sub> = -5.2 V	1,2		50	
		-6.2 V V <sub>IN</sub> -26 V, I <sub>OUT</sub> = 5 mA	1 2		±45 ±55	
Line Regulation	V <sub>RLN</sub>	50 mA I <sub>OUT</sub> 1.0 A	1 2		±70 ±110	mV
Dropout Voltage	V <sub>DO</sub>	I <sub>O</sub> = 0.1 A DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 1.0 A DV <sub>O</sub> 100 mV	1 2		1	
		I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		750	μV
Output Noise Voltage	V <sub>ON</sub>	R <sub>L</sub> = 1	1,2	1.27		A
Short Circuit Current	I <sub>OS</sub>					
Maximum Output Current	I <sub>MAX</sub>		1	1.27		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	50		dB

Notes: 1. T<sub>A</sub> = 25°C.  
 2. Over full operating temperature range.  
 3. Guaranteed, not tested.

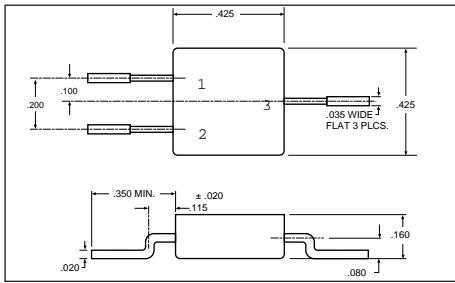
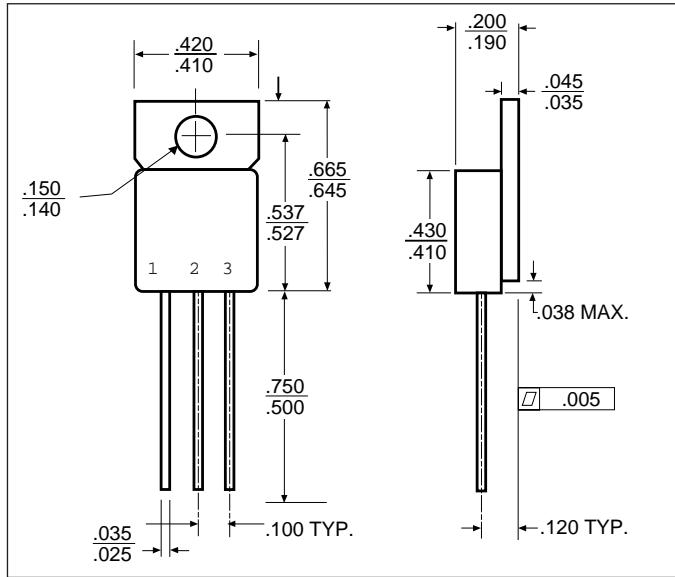
**ELECTRICAL CHARACTERISTICS, OM2990-5.2N2 (-5.2 VOLTS)**

Test Conditions are -55°C T<sub>A</sub> 125°C, V<sub>IN</sub> = -10.2V, C<sub>OUT</sub> = 47 μF (unless otherwise specified).

Parameter	Symbol	Test Conditions	Notes	Min.	Max.	Unit
Output Voltage	V <sub>OUT</sub>	5 mA ≤ I <sub>O</sub> ≤ 300 mA	1 2	-5.30 -5.46	-5.10 -4.94	V
Quiescent Current	I <sub>O</sub>	I <sub>O</sub> ≤ 300 mA	1 2		7 14	mA
		I <sub>O</sub> = 300 mA, V <sub>IN</sub> = -5.2 V	1,2		55	
		-6.2 V V <sub>IN</sub> -26 V, I <sub>OUT</sub> = 5 mA	1 2		±45 ±60	
Line Regulation	V <sub>RLN</sub>	50 mA I <sub>OUT</sub> 300 mA	1 2		±80 ±120	mV
Dropout Voltage	V <sub>DO</sub>	I <sub>O</sub> = 100 mA DV <sub>O</sub> 100 mV	1 2		3	V
		I <sub>O</sub> = 300 mA DV <sub>O</sub> 100 mV	1 2		1	
		I <sub>O</sub> = 5 mA, 10 Hz - 100 kHz	3		800	μV
Output Noise Voltage	V <sub>ON</sub>	R <sub>L</sub> = 1	1 2	300 250		A
Short Circuit Current	I <sub>OS</sub>					
Maximum Output Current	I <sub>MAX</sub>		1	300		A
Ripple Rejection	R <sub>R</sub>	V <sub>ripple</sub> = 1 V <sub>ms</sub> I <sub>OUT</sub> = 5 mA, f = 1 kHz	1	50		dB

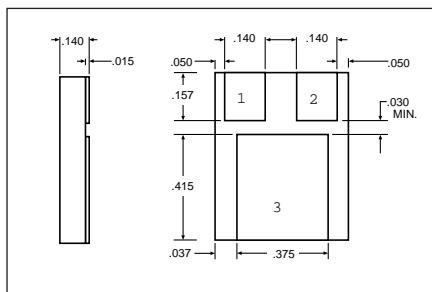
Notes: 1. T<sub>A</sub> = 25°C.  
 2. Over full operating temperature range.  
 3. Guaranteed, not tested.

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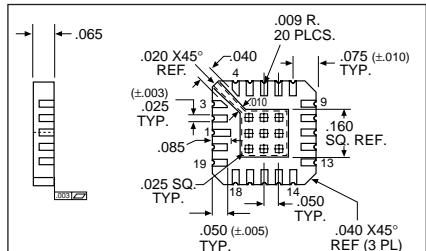
OM 2990 SMM

Front View  
Pin 1 - Ground  
Pin 2 - Output  
Pin 3 - Input  
Case - Isolated



SMD 1 OM 2990 NMM

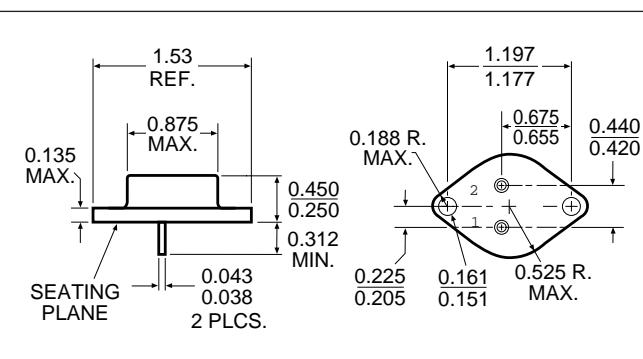
"N" PACKAGE  
Pin 1 - Ground  
Pin 2 - Output  
Pin 3 - Input



LCC 20

OM 2990 N2M

Pin 1	NC	Pin 11	V <sub>OUT</sub>
Pin 2	NC	Pin 12	V <sub>OUT</sub>
Pin 3	NC	Pin 13	NC
Pin 4	NC	Pin 14	NC
Pin 5	NC	Pin 15	V <sub>IN</sub>
Pin 6	Ground	Pin 16	V <sub>IN</sub>
Pin 7	NC	Pin 17	V <sub>IN</sub>
Pin 8	NC	Pin 18	NC
Pin 9	V <sub>OUT</sub> (Sense)	Pin 19	NC



TO-204AA (TO-3)

OM 2990 NKM  
Pin 1 - Ground  
Pin 2 - Output

ООО "ЛайфЭлектроникс"

"LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибуторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибуторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помочь разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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