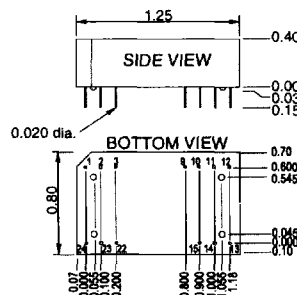


2 WATT RM SERIES SINGLE/DUAL OUTPUT

Model	Input Range Vdc		Output	
	Min	Max	Vdc	mA
12S12.165RM	10.8	13.2	12	165
5D12.085RM	4.5	5.5	±12	±85
5D15.070RM	4.5	5.5	±15	±70
24D15.070RM	21.6	26.4	±15	±70
Load Regulation	0.5% Typical			
Line Regulation	0.2% Typical			
Noise	50mV p-p			
Isolation	700Vdc			
Case Operating Temperature	-25°C to +85°C			
Storage Temperature	-55°C to +100°C			



Pin	Function
1, 24	+INPUT
2, 23	-OUTPUT
3, 22	OUTPUT CMN
10, 15	OUTPUT CMN
11, 14	+OUTPUT
12, 13	-INPUT

Mechanical tolerances unless otherwise noted:
X.XX dimensions: ±0.02 inches
X.XXX dimensions: ±0.005 inches

1.5 TO 3 WATT UM SERIES SINGLE OUTPUT DIP

- 1.5 and 3 Watts Semi-Regulated Outputs
- High Efficiency
- Low Cost
- Industry Standard 24 Pin DIP Package
- Water Washable Construction
- 5 Year Warranty

Description

The CALEX UM series provides a semi-regulated output in a small package with an industry standard pinout. Isolation allows flexibility in connecting grounds for lowest system noise. The high efficiency means efficient use of your system power.

The UM series contains filters at the input and output and generally no extra parts are required. Four terminal operation is easy which allows using negative inputs or having a negative output

General Specifications*

Isolation		
Isolation Voltage	Min.	700Vdc
Input to Output 10µA	Typ.	20pF
Input to Output Capacitance	Typ.	20pF
Environmental		
Case Operating Range	Min.	-40°C
No Derating	Max.	85°C
Case Functional Range (3)	Min.	-50°C
	Max.	100°C
Storage Range	Min.	-55°C
	Max.	110°C
Thermal Impedance (4)	Typ.	34°C/Watt
Unit Weight	Typ.	0.5 oz
Case Material	Non Conductive Plastic	

Notes:

* All parameters measured at Tc = 25°C, nominal input voltage and full rated load unless otherwise noted. Refer to the CALEX Application Notes for the definition of terms, measurement circuits and other information.

All tests with connections to all active pins. Operation with connection to only one pin will not harm the unit.

- (1) Line regulation is for a 1.0% change in input voltage.
- (2) Noise is measured per CALEX application notes. Measurement bandwidth is 20 MHz. Output noise is measured with a 10µF/25V solid tantalum capacitor connected across the output pins.
- (3) The functional temperature range is intended to give an additional data point for use in evaluating this power supply. At the low functional temperature the converter will function with no side effects, however, sustained operation at the high functional temperature will reduce expected operational life. The data sheet specifications are not guaranteed over the functional temperature range.
- (4) The case thermal impedance is specified as the case temperature rise over ambient per package watt dissipated.

Model	Input Range Vdc		Output		
	Min	Max	Vdc	mA	Power W
5S5.300UM	4.5	5.5	5.0	300	1.5
5S5.600UM	4.5	5.5	5.0	600	3
5S12.125UM	4.5	5.5	12.0	125	1.5
5S12.250UM	4.5	5.5	12.0	250	3
5S15.100UM	4.5	5.5	15.0	100	1.5
5S15.200UM	4.5	5.5	15.0	200	3
12S5.300UM	10.8	13.2	5.0	300	1.5
12S5.600UM	10.8	13.2	5.0	600	3
12S12.125UM	10.8	13.2	12.0	125	1.5
12S12.250UM	10.8	13.2	12.0	250	3
12S15.100UM	10.8	13.2	15.0	100	1.5
12S15.200UM	10.8	13.2	15.0	200	3

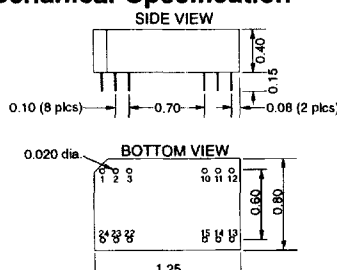
Input Parameters*

Model	5S5.300UM	5S5.600UM	5S12.125UM	5S12.250UM	5S15.100UM	5S15.200UM
Voltage Range	Min	4.5Vdc				
	Max	5.5Vdc				
Input Current	Full Load	Typ. 365mA	750mA	361mA	740mA	361mA
	No Load	Typ. 25mA	25mA	25mA	25mA	25mA
Efficiency	Typ.	82%	80%	83%	81%	83%
Switching Frequency	Typ.	175kHz				
Model	12S5.300UM	12S5.600UM	12S12.125U	12S12.250U	12S15.100U	12S15.200U
Voltage Range	Min	10.8Vdc				
	Max	13.2Vdc				
Input Current	Full Load	Typ. 155mA	312mA	151mA	310mA	151mA
	No Load	Typ. 25mA	25mA	25mA	25mA	25mA
Efficiency	Typ.	82%	80%	83%	81%	83%
Switching Frequency	Typ.	175kHz				

Output Parameters*

Model		5S5.300UM	5S5.600UM	5S12.125UM	5S12.250UM	5S15.100UM	5S15.200UM
		12S5.300UM	12S5.600UM	12S12.125U	12S12.250U	12S15.100U	12S15.200U
Output Voltage		5Vdc	5Vdc	12Vdc	12Vdc	15Vdc	15Vdc
Output Voltage Accuracy	Min.	4.80Vdc		11.52Vdc		14.40Vdc	
	Typ.	5.00Vdc		12.00Vdc		15.00Vdc	
	Max.	5.20Vdc		12.48Vdc		15.60Vdc	
Output Voltage, No Load	Typ.	6Vdc	6.5Vdc	14Vdc	14.5Vdc	18Vdc	18.7Vdc
Rated Load Range	Min.	0mA	0mA	0mA	0mA	0mA	0mA
	Max.	300mA	600mA	125mA	250mA	100mA	200mA
Load Regulation 20 - 100% Load	Typ.	6%	13%	6%	12%	6%	12%
Line Regulation (1) Vin = Min-Max Vdc	Typ.	1.2%/%					
Noise, Peak - Peak (2)	Typ.	50mV p-p			75mV p-p		
Temperature Coefficient	Typ.	200ppm/°C					
Short Circuit Protection to Common	Short Term (Momentary)						

Mechanical Specification



Pin	Function
1, 24	+INPUT
2, 23	N/C
3, 22	N/C
10, 15	CMN
11, 14	+OUTPUT
12, 13	-INPUT

Mechanical tolerances unless otherwise noted:
X.XX dimensions: ±0.02 inches
X.XXX dimensions: ±0.005 inches