

# Special Products

3355 Vincent Road, Pleasant Hill, CA 94523-4389 Telephone (415) 932-3911 Telex: 269 888 Telefax: (415) 932-6017

T-57-11  
**CALEX**



## I60S5.135 mA/DC CONVERTER— Telecommunications Current Loop Power Source

### DESCRIPTION

This DC/DC converter was designed especially for BELL 113 T1 Repeater Current Loop operation. The converter provides a fully regulated 5 Volts of TTL compatible power from a nominal 60mA current loop.

The unique proprietary design of these converters allows an outstanding full load efficiency of 78% for a 0.7 Watt output. These converters are used in any application where a current loop is present and regulated isolated 5 Volt power is needed, such as alarm systems and telephone test equipment.

The converter is fully protected from voltage transients by 500 Watt peak pulse power TransZorbs on the input and output.

### FEATURES

- Full BELL 113 Paragraph 7 Compatibility
- Input Current Range from 57 to 200mA
- Fully TTL Compatible, 135mA, 5 Volt Output
- Low Noise, Fully Filtered Design
- Six Sided Fully Shielded, Low Thermal Gradient Copper Case
- Input and Output Protection by TransZorbs for Zero Failure Rate Operation
- 500 VDC Input to Output Isolation
- 2 x 2 x 0.375 Inch Low Profile Package
- Nominal 60mA input
- 5 VDC at 135 mA Output

## 12Q15.050 DC/DC CONVERTER Quad Output Power Source

### DESCRIPTION

These DC/DC converters were designed for dual channel analytical instruments and instrumentation. The unique dual output sections are fully isolated from each other and from the input common to provide the required non-interaction between output channels.

Other features include the ability to lock the converters to the systems internal clock over a frequency range of 70 to 110KHz with an external TTL signal.

As with all CALEX DC/DC converters all outputs are fully regulated and completely specified for all line load and environmental conditions.

### FEATURES

- Twin Fully Floating Dual Output Sections
- Switching Frequency Synchronize Input (70-110KHz)
- Fully Input and Output Filtered for Low Noise Operation
- Six Sided Shielded High EMI Resistivity Steel Case
- Separate Case Common Pin Connection for Easy System Integration
- Fully Specified Output Voltage Error Bands
- 2 x 2 x 0.375 Inch Low Profile Package
- 12 VDC input
- Two isolated  $\pm 15$  VDC outputs at  $\pm 50$ mA each



# Case Sizes and Mounting Kits

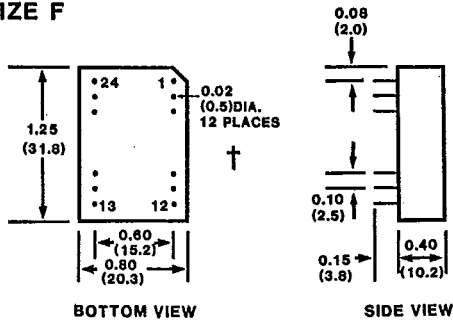


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## 0.5 to 1.0 Watt Case pages 4-6

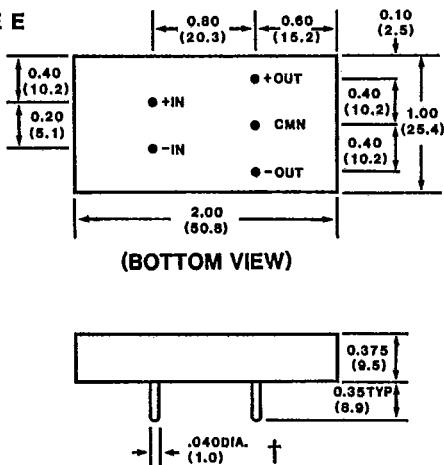
### CASE SIZE F



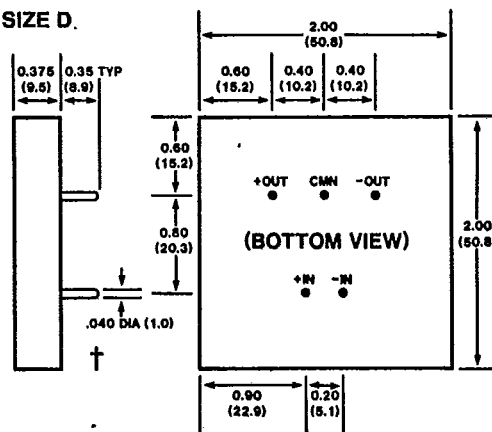
PIN NUMBER	SINGLE OUTPUTS	DUAL OUTPUTS
1	+Vin	+Vin
2	NC	-Vout
3	NC	OUT COM
10	-Vout	OUT COM
11	+Vout	+Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+Vout	+Vout
15	-Vout	OUT COM
22	NC	OUT COM
23	NC	-Vout
24	+Vin	+Vin

## 1.8 Watt thru 6 Watt Cases pages 7-27

### CASE SIZE E



### CASE SIZE D



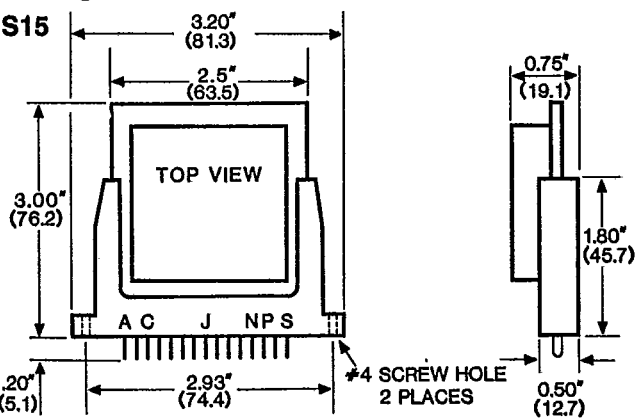
Alternate Industry Standard 5 pin configuration available upon request. Consult factory for details (415)932-3911.

† Seal around terminals is not hermetic. Do not immerse units in any liquid.

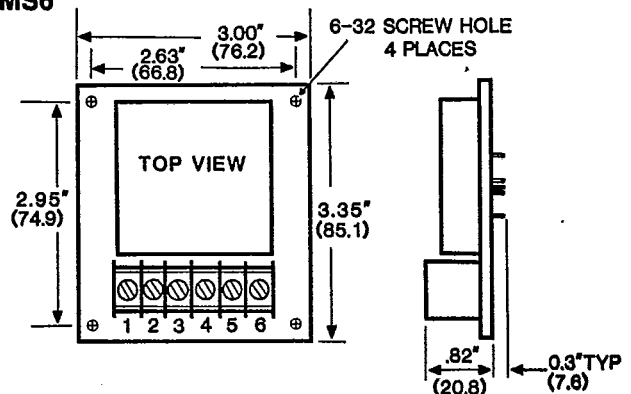
NOTE: Single output pin configuration not shown.

### Mounting Kits for D and E Cases

#### MS15



#### MS6



PIN	FUNCTION	
	SINGLE	DUAL
A	+ DC INPUT	+ DC INPUT
C	- DC INPUT	- DC INPUT
J	N/C	CMN.
N	KEY	KEY
P	+ OUTPUT	+ OUTPUT
S	CMN.	- OUTPUT

SCREW TERMINAL	FUNCTION	
	SINGLE	DUAL
1	+ OUTPUT	+ OUTPUT
2	N/C	CMN.
3	CMN.	- OUTPUT
4	N/C	N/C
5	+ DC INPUT	+ DC INPUT
6	- DC INPUT	- DC INPUT

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