

MILITARY

SERIES LFB (-40°C to +85°C Operating Temperature)
SERIES LMB (-55°C to +85°C Operating Temperature)

**Dual Isolated Outputs
 Special Voltage
 Combinations Available**

**3.3 to 250 VDC Output available
 Isolated Regulated 75 Watts DC-DC Converters
 Wide Input Range/ 36-72 VDC
 Short Circuit Protected
 ‡ Parallel Operation**

SERIES LFB/LMB SINGLE - 75 WATTS - INPUT 36-72 VDC

INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)	EFF. @ FULL LOAD TYPICAL (%)	MAX LOAD REGULATION (%) **		MAX LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (MVP-P)	OUTPUT VOLTAGE TOLERANCE (%)**	Series LFB single (-40°C to +85°C)		Series LMB single (-55°C to +85°C)	
				10-50%	50-100%	36-48V	48-72V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
				36-72	3.3	30	74			1.5	1.5	0.75	0.75
36-72	5	50	80	1	1	0.75	0.75	50	1.5	LFB5S	258.00	LMB5S	387.00
36-72	5.2	50	80	1	1	0.75	0.75	50	1.5	LFB5.2S	258.00	LMB5.2S	387.00
36-72	9	65	84	1	1	0.75	0.75	50	1	LFB9S	258.00	LMB9S	387.00
36-72	12	75	84	0.75	0.75	0.5	0.5	50	1	LFB12S	258.00	LMB12S	387.00
36-72	15	75	84	0.75	0.75	0.5	0.5	50	1	LFB15S	258.00	LMB15S	387.00
36-72	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFB24S	258.00	LMB24S	387.00
36-72	28	75	87	0.5	0.5	0.5	0.5	50	0.5	LFB28S	258.00	LMB28S	387.00
36-72	48	75	85	0.5	0.5	0.5	0.5	50	0.5	LFB48S	258.00	LMB48S	387.00
36-72	100	75	85	0.5	0.5	0.5	0.5	100	0.5	LFB100S	387.00	LMB100S	580.50

10% Minimum load required at all times
 *Using proper thermal management maximum temp of + 85°C (case)
 **Reading taken at nominal 48 VDC input

SERIES LFB/LMB DUAL - 75 WATTS - INPUT 36-72 VDC

INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)	EFF. @ FULL LOAD TYPICAL (%)	MAX LOAD REGULATION (%) **		MAX LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (MVP-P)	OUTPUT VOLTAGE TOLERANCE (%)**	Series LFB single (-40°C to +85°C)		Series LMB single (-55°C to +85°C)	
				10-50%	50-100%	36-48V	48-72V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
				36-72	5	50	80			1	1	0.75	0.75
36-72	9	65	84	1	1	0.75	0.75	50	1	LFB9D	348.00	LMB9D	522.00
36-72	12	75	84	0.75	0.75	0.5	0.5	50	1	LFB12D	348.00	LMB12D	522.00
36-72	15	75	85	0.75	0.75	0.5	0.5	50	1	LFB15D	348.00	LMB15D	522.00
36-72	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFB24D	348.00	LMB24D	522.00
36-72	28	75	87	0.5	0.5	0.5	0.5	50	0.5	LFB28D	348.00	LMB28D	522.00
36-72	48	75	85	0.5	0.5	0.5	0.5	50	0.5	LFB48D	348.00	LMB48D	522.00

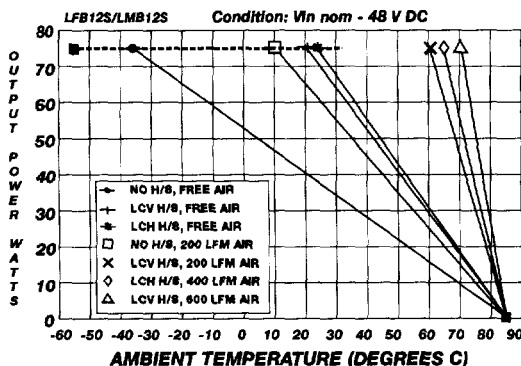
10% Minimum load required at all times
 *Using proper thermal management maximum temp of + 85°C (case)
 **Reading taken at nominal 48 VDC input

‡HIGH VOLTAGE SERIES LFB/LMB TO 250 VDC - 50 WATTS - INPUT 36-72 VDC

INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)	EFF. @ FULL LOAD TYPICAL (%)	MAX LOAD REGULATION (%) **		MAX LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (MVP-P)	OUTPUT VOLTAGE TOLERANCE (%)**	PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
				20-50%	50-100%	36-48V	48-72V						
				36-72	125	50	84						
36-72	150	50	84	0.5	0.5	0.3	0.3	1	0.5	LFB150S	387.00	LMB150S	580.50
36-72	175	50	84	0.5	0.5	0.3	0.3	1	0.5	LFB175S	387.00	LMB175S	580.50
36-72	200	50	84	0.5	0.5	0.3	0.3	1	0.5	LFB200S	516.00	LMB200S	774.00
36-72	225	50	84	0.5	0.5	0.3	0.3	1	0.5	LFB225S	516.00	LMB225S	774.00
36-72	250	50	84	0.5	0.5	0.3	0.3	1	0.5	LFB250S	516.00	LMB250S	774.00

10% Minimum load required at all times
 *Using proper thermal management maximum temp of + 85°C (case)
 ‡UL approval recognition pending

Full thermal analysis can be determined using application notes on page 138. By using the efficiency and thermal resistance of your desired unit to the formula you can complete your evaluation. The curves below were generated for Part #LFB12S/LMB12S using Application Notes. Please consult factory with any questions.



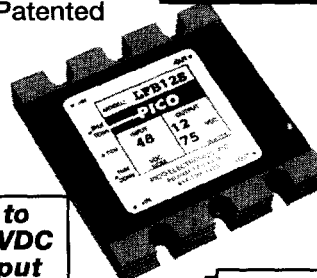
46 Standard Models

Patented

Up to 250 VDC Output Models

Delivery - stock to one week

Application Notes
 page 138
 Mechanical Configuration
 page 140



‡Parallel Operation
 Consult factory to optimize for your application

The new PICO Series LFB and LMB of high power DC-DC Converters allow a wide input voltage of 36-72 VDC, while maintaining a regulated output. They are fully safeguarded for over voltage, over temperature and continuous short circuit protection.

The availability of Dual Isolated outputs, small size, and the capability of parallel operation as standard features should reduce your design and component costs, while the fixed frequency operation helps parallel connections for higher power requirements.

This high-density unit is assembled in the USA with PICO quality and component selection, allowing it to meet the most stringent commercial requirements.

FEATURES:

- Dual isolated outputs
- Short circuit protection
- Input voltage protection
- Thermal, over temp. shutdown
- Line regulation
- Load regulation
- No external components required
- Hi density, hi efficiency design
- Remote shutdown
- Trim capabilities
- Fixed frequency-100 KHz

TYPICAL CHARACTERISTICS:

Frequency: 100 KHz
Base plate: Max. +85° C
Operating Temp.: See thermal chart.
 -40°C to +85°C base plate
 -55°C to +85°C base plate
Test conditions: 25° C ambient
Isolation Base Input: 2121 VDC
Isolation Input output: 4242 VDC
Isolation Output to Base: 1000 VDC
Storage Temp.: - 55° C to +105° C

For All Variations Call Factory
SERIES LFB
 (-40°C to +85°C Operating Temperature)
SERIES LMB
 (-55°C to +85°C Operating Temperature)

SURGE	Meets MIL STD 704
VIBRATION	Meets MIL STD 202 Method 204 Cond. D
HUMIDITY	Meets MIL STD 202 Method 106
SHOCK	Meets MIL STD 202 Method 213 Cond. I
ALTITUDE	Meets MIL STD 202 Method 105 Cond. D
Selected MIL STD 883 Options also Available	
STABILIZATION BAKE	MIL STD 883 Method 1008 24 Hrs TA=125°C
BURN IN	MIL STD 883 Method 1015 160 Hrs at 90°C
TEMPERATURE CYCLE	MIL STD 883 -55°C to +105°C Method 1010 Cond. B