MILITARY

SERIES LFC (-40°C to +85°C Operating Temperature)
SERIES LMC (-55°C to +85°C Operating Temperature)

3.3 to 250 VDC Outputs Available
Isolated Regulated 75 Watts DC-DC Converters
Wide Input Range/100-180 VDC
Short Circuit Protected
‡ Parallel Operation

Dual Isolated Outputs
Special Voltage Combinations Available

The new PICO Series LFC and LMC of high power DC-DC Converters allow a wide input voltage of 100-180 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 Khtz

TYPICAL CHARACTERISTICS:

Frequency: 100 Khtz
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 LFC

(-40°C to +85°C Operating Temperature)

SERIES LMC

(-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

SERIES LFC/LMC SINGLE - 75 WATTS - INPUT 100-180 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 LFC single (- 40°C to +85°C)		Series LMC single (- 55°C to +85°C)	
				10-50%	50-100%	100-150V	150-180V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
100-180	3.3	30	74	1.25	1.25	0.75	0.75	50	2	LFC3.3S	258.00	LMC3.3S	387.00
100-180	5	50	81	1	1	0.75	0.75	50	1.5	LFC5S	258.00	LMC5S	387.00
100-180	5.2	50	81	1	1	0.75	0.75	50	1.5	LFC5.2S	258.00	LMC5.2S	387.00
100-180	9	65	84	0.75	0.75	0.5	0.5	50	1	LFC9S	258.00	LMC9S	387.00
100-180	12	75	85	0.75	0.75	0.5	0.5	50	1	LFC12S	258.00	LMC12S	387.00
100-180	15	75	86	0.75	0.75	0.5	0.5	50	1	LFC15S	258.00	LMC15S	387.00
100-180	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC24S	258.00	LMC24S	387.00
100-180	28	75	87	0.5	0.5	0.3	0.3	50	0.5	LFC28S	258.00	LMC28S	387.00
100-180	48	75	85	0.5	0.5	0.3	0.3	50	0.5	LFC48S	258.00	LMC48S	387.00
100-180	100	75	85	0.5	0.5	0.3	0.3	100	0.5	LFC100S	387.00	LMC100S	580.50

10% Minimum load required at all times
**Reading taken at nominal 150 VDC input
*Using proper thermal management maximum temp of + 85°C (case)

SERIES LFC/LMC DUAL - 75 WATTS - INPUT 100-180 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 LFC single (- 40°C to +85°C)		Series LMC single (- 55°C to +85°C)	
				10-50%	50-100%	100-150V	150-180V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
100-180	5	50	81	1	1	0.75	0.75	50	1.5	LFC5D	348.00	LMC5D	522.00
100-180	9	65	84	1	1	0.75	0.75	50	1	LFC9D	348.00	LMC9D	522.00
100-180	12	75	85	0.75	0.75	0.5	0.5	50	1	LFC12D	348.00	LMC12D	522.00
100-180	15	75	88	0.75	0.75	0.5	0.5	50	1	LFC15D	348.00	LMC15D	522.00
100-180	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC24D	348.00	LMC24D	522.00
100-180	28	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC28D	348.00	LMC28D	522.00
100-180	48	75	85	0.5	0.5	0.5	0.5	50	0.5	LFC48D	348.00	LMC48D	522.00

10% Minimum load required at all times
**Reading taken at nominal 150 VDC input
*Using proper thermal management maximum temp of + 85°C (case)

†HIGH VOLTAGE SERIES LFC/LMC TO 250 VDC - 50 WATTS - INPUT 100-180 VDC

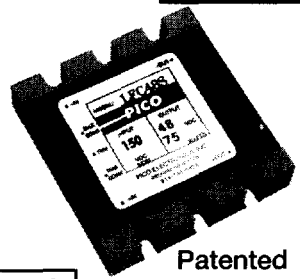
INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)*	EFF.● FULL LOAD TYPICAL (%)**	MAX LOAD REGULATION (%) **		MAX LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (%)	OUTPUT VOLTAGE TOLERANCE (±%)**	PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
				20-50%	50-100%	100-150V	150-180V						
100-180	125	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC125S	387.00	LMC125S	580.50
100-180	150	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC150S	387.00	LMC150S	580.50
100-180	175	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC175S	387.00	LMC175S	580.50
100-180	200	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC200S	516.00	LMC200S	774.00
100-180	225	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC225S	516.00	LMC225S	774.00
100-180	250	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC250S	516.00	LMC250S	774.00

10% Minimum load required at all times
**Reading taken at nominal 150 VDC input
*Using proper thermal management maximum temp of + 85°C (case)
†UL approval recognition pending.

46 Standard Models

Application Notes page 138
Mechanical Configuration page 140

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 #LFC12S/LMC12S using Application Notes. Please consult factory with any questions.



Patented

‡Parallel Operation
Consult factory to optimize for your application

Up to 250 VDC Output Models