Military DC-DC Converters

Series LFC/LMC Single and Series LFC/LMC Dual

Isolated Regulated 75 Watts, Wide Input Range/100-180 VDC
Fully Regulated, Short Circuit Protected
Parallel Operation Available

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 temperature: 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 temperature: -55° C to +105° C

- **46 Standard Models**

For all variations, call factory.
For Parallel Operation: Add suffix "P"
(i.e. LFC/LMC5SP). Consult factory to optimize for your application.

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, case
Temperature Cycle: MIL STD 883 -55°C to +105°C Method 1010 Cond. B

The PICO Series LFC and LMC Series 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 operations 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.

Series LFC/LMC Single * 75 Watts * Input 100-180 VDC

Input Volt. Range (V DC)	Outp. Volt. (V DC)	Max. Output Power * (W)	EFF. Full Load Typical ** (%)	Max. Load Regulation (%)**		Max. Line Regulation At Full Load (%)		Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Outp. Volt. Toler. ** (± %)	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 (US $)	Pico Part Number	Price (US $)
100-180	3.3	30	74	1.25	1.25	0.75	0.75	50	2.0	LFC3.3S	357.41	LMC3.3S	487.38
100-180	5	50	81	1.00	1.00	0.75	0.75	50	1.5	LFC5S	357.41	LMC5S	487.38
100-180	5.2	50	81	1.00	1.00	0.75	0.75	50	1.5	LFC5.2S	357.41	LMC5.2S	487.38
100-180	9	65	84	0.75	0.75	0.5	0.5	50	1.0	LFC9S	357.41	LMC9S	487.38
100-180	12	75	85	0.75	0.75	0.5	0.5	50	1.0	LFC12S	357.41	LMC12S	487.38
100-180	15	75	86	0.75	0.75	0.5	0.5	50	1.0	LFC15S	357.41	LMC15S	487.38
100-180	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC24S	357.41	LMC24S	487.38
100-180	28	75	87	0.5	0.5	0.3	0.3	50	0.5	LFC28S	357.41	LMC28S	487.38
100-180	48	75	85	0.5	0.5	0.3	0.3	50	0.5	LFC48S	357.41	LMC48S	487.38
100-180	100	75	85	0.5	0.5	0.3	0.3	100	0.5	LFC100S	536.12	LMC100S	731.08

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

Series LFC/LMC Dual * 75 Watts * Input 100-180 VDC

Input Volt. Range (V DC)	Outp. Volt. (V DC)	Max. Output Power * (W)	EFF. Full Load Typical ** (%)	Max. Load Regulation (%)**		Max. Line Regulation At Full Load (%)		Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Outp. Volt. Toler. ** (± %)	Series LFC Dual (-40° C to +85° C)		Series LMC Dual (-55° C to +85° C)	
				10-50%	50-100%	100-150V	150-180V			Pico Part Number	Price (US $)	Pico Part Number	Price (US $)
100-180	5	50	81	1.0	1.0	0.75	0.75	50	1.5	LFC5D	482.09	LMC5D	657.40
100-180	9	65	84	1.0	1.0	0.75	0.75	50	1.0	LFC9D	482.09	LMC9D	657.40
100-180	12	75	85	0.75	0.75	0.5	0.5	50	1.0	LFC12D	482.09	LMC12D	657.40
100-180	15	75	86	0.75	0.75	0.5	0.5	50	1.0	LFC15D	482.09	LMC15D	657.40
100-180	24	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC24D	482.09	LMC24D	657.40
100-180	28	75	87	0.5	0.5	0.5	0.5	50	0.5	LFC28D	482.09	LMC28D	657.40
100-180	48	75	85	0.5	0.5	0.5	0.5	50	0.5	LFC48D	482.09	LMC48D	657.40

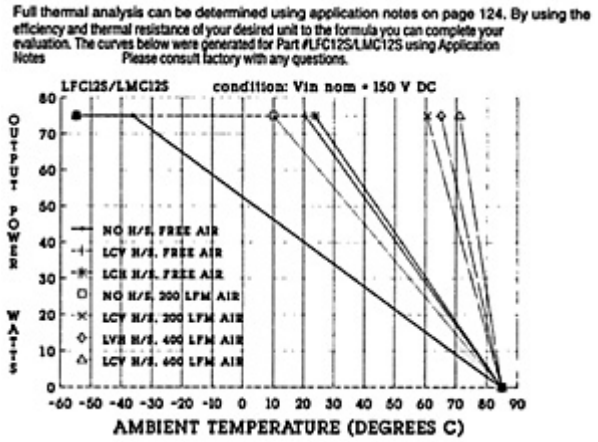
10% Minimum load required at all times.
* Using proper thermal management, maximum temp. of +85° C (case)
** Reading taken at nominal 150 VDC input

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

INPUT VOLTAGE RANGE (VDC)	OUTPUT VOLTAGE (VDC)	MAX. OUTPUT POWER (W)*	EFF. @ FULL LOAD TYP. (%)**	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (%)	OUTPUT VOLTAGE Tolerance (±%)**	SERIES LFC SINGLE (-40°C to +85°C)		SERIES LMC SINGLE (-55°C to +85°C)	
				20-50%	50-100%	100-150 V	150-180 V			PICO PART NUMBER	PRICE (US $)	PICO PART NUMBER	PRICE (US $)
100-180	125	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC125S	536.12	LMC125S	731.08
100-180	150	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC150S	563.12	LMC150S	731.08
100-180	175	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC175S	563.12	LMC175S	731.08
100-180	200	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC200S	714.83	LMC200S	974.77

100-180	225	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC225S	714.83	LMC225S	974.77
100-180	250	50	85	0.5	0.5	0.3	0.3	1	0.5	LFC250S	714.83	LMC250S	974.77
10% Minimum load required at all times *Using proper thermal management maximum temp of +85°C (case) **Reading taken at nominal 150 VDC input ****UL approbal recognition pending													

[VIEW HEAT SINKS](#) [GO TO APPLICATION NOTES](#) [GO TO MECHANICAL CONFIGURATION](#)



[Larger Version of Graph](#)

For immediate engineering assistance or to place an order: **Call Toll Free: 800-431-1064**

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