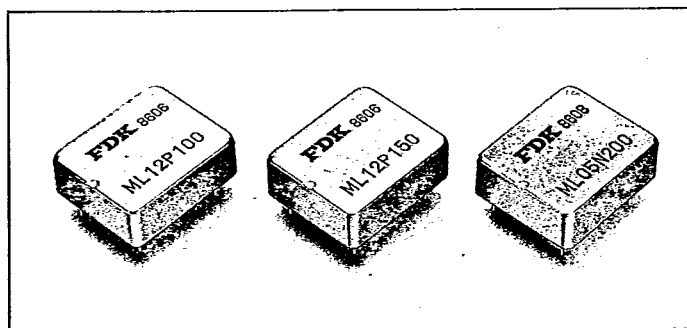


DC-DC CONVERTERS

B-15-11

T-57-11

STANDARD PRODUCT ML SERIES



ML series DC-DC converters having a 0.6 to 2.25 W output are thick film hybrid IC converters packaged into identical dimensions, with a stable conversion of a +5 V input voltage into positive, negative or dual output.

Features

- ① High reliability
- ② Compact and lightweight
- ③ Excellent noise suppression by high-performance EMI filters
- ④ Featuring thick film hybrid IC
- ⑤ Radiation noise shielding by metallic casing

Electrical characteristics

Type		Model name	Input conditions			Output conditions		Output characteristics					Shape, dimension & pin location					
			Input voltage	Input voltage range	Efficiency	Output voltage	Load current	Input variation	Load variation	Temperature coefficient	Ripple noise	Rise time						
			V	%	%	V	mA	%	%	%/°C	mVp-p	msec.						
Non-isolation type	Positive output	ML06P200	+5	±10	67typ.	+ 6	40~ 200	1.0typ.	1.6typ.	0.01typ.	60max.	80typ.	a					
		ML06P300					60~ 300											
		ML09P100					20~ 100											
		ML09P150			30~ 150	+ 9	0.8typ.	1.5typ.										
		ML09P200			40~ 200													
		ML09P250			50~ 250													
		ML12P100			20~ 100	+12	0.7typ.	1.4typ.	0.03typ.									
		ML12P150			30~ 150													
		ML12P200			40~ 200													
		ML15P080			16~ 80	+15	0.6typ.	1.3typ.	0.05typ.									
		ML15P100			20~ 100													
		ML15P125			25~ 125													
		ML15P150			30~ 150	+18	0.5typ.	1.0typ.										
		ML18P050			10~ 50													
		ML18P080			16~ 80													
	ML18P100	20~ 100			+24	0.4typ.	0.9typ.											
	ML18P125	25~ 125																
	ML24P050	10~ 50																
	ML24P075	15~ 75																
	ML24P100	20~ 100																
	Negative output	ML05N200			+5	±10	57typ.	- 5	40~ 200	1.3typ.				1.2typ.	0.01typ.	60max.	80typ.	a
		ML05N300							60~ 300									
		ML06N150							30~ 150									
ML06N200		40~ 200	- 6	60~ 300			1.0typ.	1.0typ.										
ML06N300		20~ 100																
ML09N100		30~ 150																
ML09N150		40~ 200	- 9	20~ 100			1.0typ.	1.0typ.										
ML09N200		40~ 200																
ML12N100		20~ 100																
ML12N125		25~ 125	-12	30~ 150			1.0typ.	1.0typ.										
ML12N150		30~ 150																
ML15N080		16~ 80																
ML15N100		20~ 100	-15	20~ 100			1.0typ.	1.0typ.										
ML15N125		25~ 125																
ML15N150		30~ 150																
ML18N050		10~ 50	-18	15~ 75			1.0typ.	1.0typ.										
ML18N075		20~ 100																
ML18N100		5~ 25																
ML24N025	10~ 50	-24	15~ 75	1.0typ.	1.0typ.													
ML24N050	10~ 50																	
ML24N075	15~ 75																	
Isolation type	Dual output (± output)	ML09D060			± 9	±30~ 60	±1.0typ.	±4.0typ.	0.05typ.	200max.		b						
		ML12D050		±12	±10~ ±50	c												
		ML15D050		±15	±10~ ±50													

Ambient temperature = 25°C

Shapes and dimensions

