

KDD25 SERIES



DC - DC CONVERTER
25.1 ~ 27.2W TRIPLE OUTPUT

FEATURES

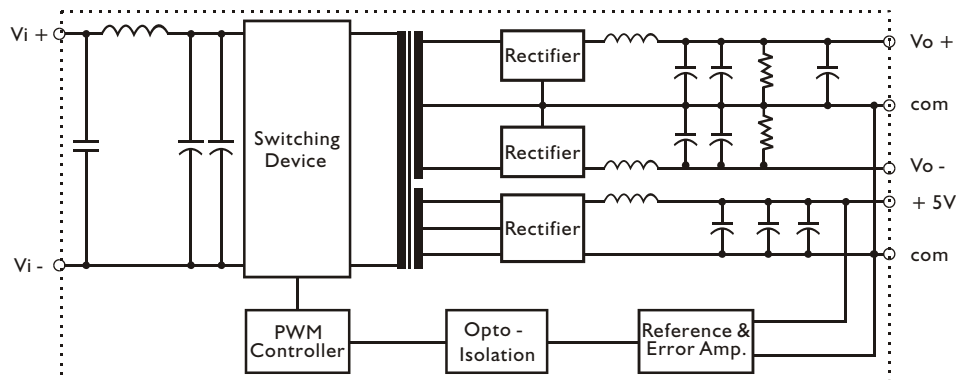
- 2:1 INPUT RANGE
- ISOLATION INPUT AND OUTPUT 1.5KV DC
- HIGH PERFORMANCE UP TO 79%
- SHORT CIRCUIT PROTECTION
- 2 YEARS WARRANTY

MODEL LIST

MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (min.)
Triple Output Models					
KDD25 - 12T01	9~18 VDC	27.2 WATTS	+5V / ±12V	+4000 / ±300 mA	76%
KDD25 - 12T02	9~18 VDC	26.5 WATTS	+5V / ±15V	+3500 / ±300 mA	77%
KDD25 - 24T01	18~36 VDC	27.2 WATTS	+5V / ±12V	+4000 / ±300 mA	77%
KDD25 - 24T02	18~36 VDC	26.5 WATTS	+5V / ±15V	+3500 / ±300 mA	78%
KDD25 - 24T03	18~36 VDC	25.1 WATTS	+5V / +12V / -5V	+4000 / +300 / -300 mA	78%
KDD25 - 48T01	36~72 VDC	27.2 WATTS	+5V / ±12V	+4000 / ±300 mA	78%
KDD25 - 48T02	36~72 VDC	26.5 WATTS	+5V / ±15V	+3500 / ±300 mA	79%
KDD25 - 48T03	36~72 VDC	25.1 WATTS	+5V / +12V / -5V	+4000 / +300 / -300 mA	79%

CIRCUIT SCHEMATIC

Block diagram for KDD25 series with triple output



SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL

Characteristics	Conditions	min.	typ.	max.	unit
Switching frequency	Vi nom, Io nom		80		KHz
Isolation voltage	Input / Output	500			VDC
Isolation resistance	Input / Output, @ 500VDC	1G			Ω
Ambient temperature	Operating at Vi nom, Io nom	-25		+ 71	°C
Case temperature	Operating at Vi nom, Io nom			+ 90	°C
Derating	Vi nom	See derating curve			% / °C
Storage temperature	Non operational	-40		+ 90	°C
M.T.B.F.	According to MIL-HDBK-217F, GF40		389,000		Hrs
Dimension	L70 x W100 x H23				mm
Cooling	Free air convection				
Case material	Metal				

INPUT SPECIFICATIONS

Characteristics	Conditions	min.	typ.	max.	unit
Input voltage range	Ta min ... Ta max, Io nom	9	12	18	VDC
		18	24	36	VDC
		36	48	72	VDC
No load input current	Vi nom, Io=0	12V models		35	mA
		24V models		30	mA
		48V models		25	mA
Input voltage w/o damage	Io nom	12V models		21	VDC
		24V models		40	VDC
		48V models		75	VDC
Input filter	Pi type				

OUTPUT SPECIFICATIONS

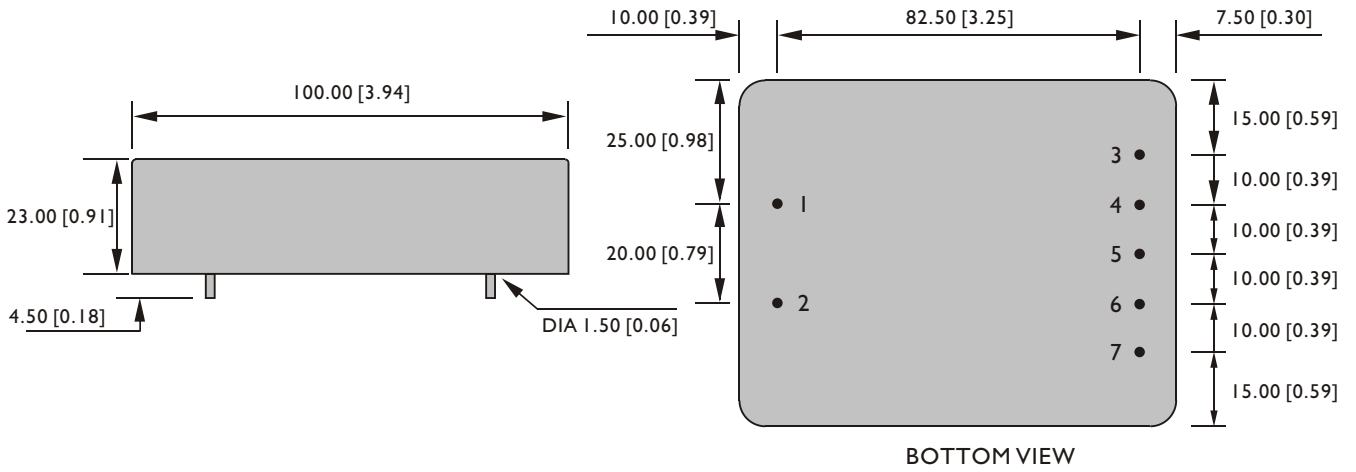
Characteristics	Conditions	min.	typ.	max.	unit
Output voltage accuracy	Vi nom, Io nom			± 2	%
	all outputs except -5V -5V output			± 3	
Minimum load	Vi nom	20			%
Line regulation	Io nom, Vi min ... Vi max			± 1	%
Load regulation	Vi nom			± 2	%
	Io min ... Io nom			± 5	%
Transient recovery time	25% load, step changed		500		μs
Temperature coefficient	Vi nom, Io nom			± 0.02	% / °C
Ripple & noise	Vi nom, Io nom, BW = 20MHz			Vout x ± 1%	mV
	all outputs except -5V -5V output			150	mV
Efficiency	Vi nom, Io nom, Po / Pi	Up to 79%, See model list			

CONTROL AND PROTECTION

Input reversed	Shunt diode built in, external fuse recommended
Output short circuit	Continuous

MECHANISM & PIN CONFIGURATION

mm [inch]



PHYSICAL CHARACTERISTICS

CASE SIZE	70 x 100 x 23 mm 2.76 x 3.94 x 0.91 inches
CASE MATERIAL	Metal
WEIGHT	270 g

PIN ASSIGNMENT

GENERAL							
PIN NO.	1	2	3	4	5	6	7
TRIPLE	Vi+	Vi-	+5V OUT	com	Vo+	com	Vo-

DERATING

