



KZ 400 SERIES

100 Watt

DC-DC CONVERTERS

FEATURES

- Current Mode Control
- 200 KHz Switching Frequency
- Remote Control Shutoff
- Adjustable Output Voltage
- Low Voltage Shutdown
- Over 100,000 Hrs MTBF per MIL STD 217D at 50°C+ G.B. Environment

APPLICATIONS

- Telecommunications
- Instrumentation
- Computers



Model	Input Range (VDC)	Output Voltages (VDC)	Output Current (AMPS)	
KZ431	20-60	5	20.0	Voltage Accuracy ± 1% Main, ± 3% Auxiliary
KZ432	20-60	12	8.3	Voltage Adjustments ± 5% (Main Only)
KZ433	20-60	15	6.7	Ripple <1%
KZ434	20-60	24	4.1	Noise (20 MHz) <2%
KZ438	20-60	5,12,12	15,1,1*	Temperature Coefficient02%/°C
KZ439	20-60	5,15,15	15,1,1*	Transient Response 1mS 0.5% V Excursion
KZ441	36-72	5	20.0	60% Load ± 40%
KZ442	36-72	12	8.3	Regulation Line/Load ± 1% Main, ± 2% Auxiliary
KZ443	36-72	15	6.7	20% Load to 100% Load
KZ444	36-72	24	4.1	Isolation (Input-to-Output) 500Vdc
KZ448	36-72	5,12,12	15,1,1*	Isolation (Terminal-To-Case) 500Vdc
KZ449	36-72	5,15,15	15,1,1*	Switching Frequency 200 KHz Typical Fixed
				Efficiency 80% Typical
				Remote Control Active low to disable outputs. Referenced to -Vin.
				FAULT PROTECTION
				Reverse Polarity Protection Yes (External fuse required)
				Overvoltage Main Yes
				Short Circuit Indefinite, Auto Recovery
				Thermal Shutdown Optional†
				ENVIRONMENTAL
				Operating Temperature -20°C to 70°C, (Baseplate at 80°C) Heat sinking may be required for certain circumstances. Consult factory for specific model number.
				Storage Temperature -40°C to 105°C
* All triple output units are available with optional 2 amp rating on CH 2,3. To order higher current option add -1 suffix to Model # i.e. KZ438-1 † All models are available with optional thermal protection to prevent exceeding operating specs. To order thermal option add suffix -04 to Model # i.e. KZ438-04. All models are available with optional side mounting configuration. To order side mounting version add suffix -02 to Model # i.e. KZ438-02.				
CONTACT OUR SALES APPLICATION DEPARTMENT WITH YOUR CUSTOM DESIGNS AND SPECIFICATIONS. AT INTRONICS WE ARE PREPARED TO RESPOND PROMPTLY TO YOUR NEEDS.				

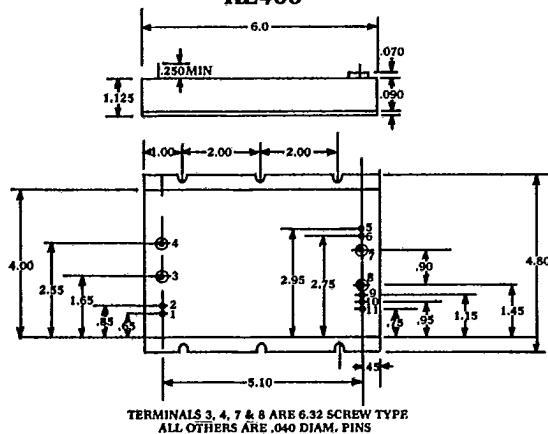
TECHNICAL HIGHLIGHTS

- Extra Fault Protection for Maximum Reliability
- All Outputs Are Independently Isolated
- Six-Sided Shielding
- Advanced Thermal Management Techniques
- External Case Grounding
- Low Ripple and Noise

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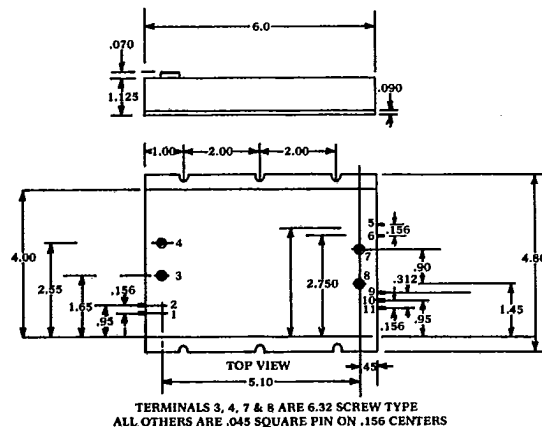
MECHANICAL OUTLINES AND CONNECTIONS

KZ400



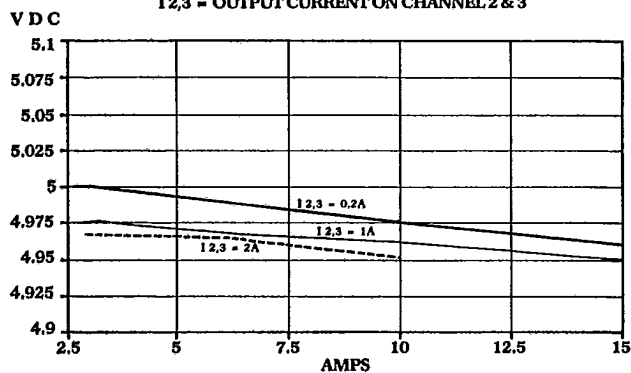
PIN	Connection
1	CASE
2	CONTROL
3	+ VIN
4	- VIN
5	+ V2
6	V2 RTN
7	+ V1
8	V1 RTN
9	+ V3
10	V3 RTN
11	TRIM

KZ400 - SIDE MOUNT



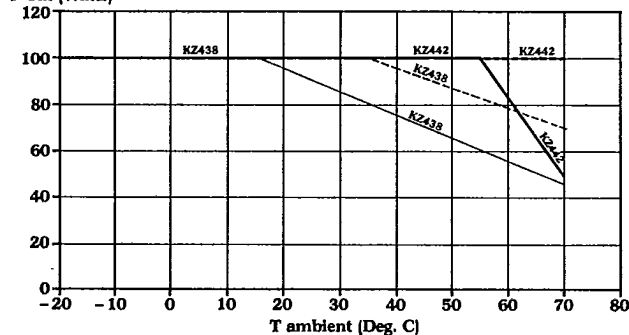
PERFORMANCE CURVES

KZ 438
OUTPUT #1 REGULATION
I_{2,3} = OUTPUT CURRENT ON CHANNEL 2 & 3

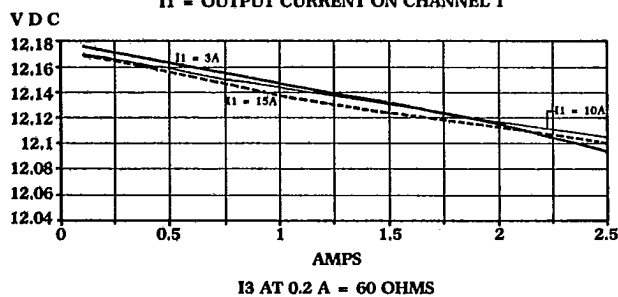


KZ400 SERIES
POWER DERATING CURVE

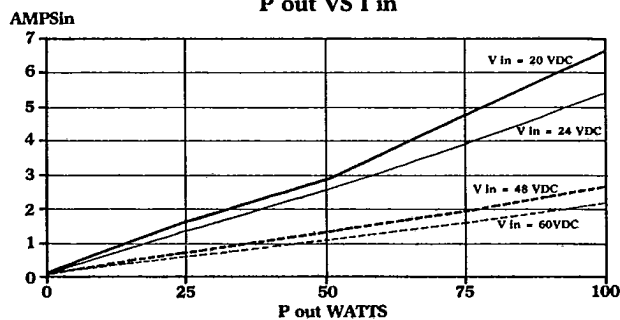
CONVECTION 200 LFM
P out (Watts)



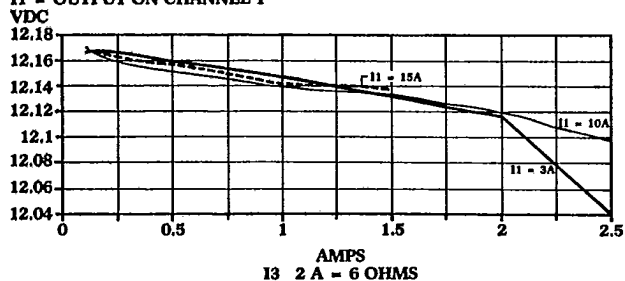
KZ 438
OUTPUT #2 REGULATION
I₁ = OUTPUT CURRENT ON CHANNEL 1



KZ 438
P out VS I in



KZ 438
OUTPUT #2 REGULATION
I₁ = OUTPUT ON CHANNEL 1



KZ 438
%EFF VS P out

