



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	
KZ432	20-60	12	8.3	
KZ433	20-60	15	6.7	
KZ434	20-60	24	4.1	
KZ438	20-60	5,12,12	15,1,1*	
KZ439	20-60	5,15,15	15,1,1*	
KZ441	36-72	5	20.0	
KZ442	36-72	12	8.3	
KZ443	36-72	15	6.7	
KZ444	36-72	24	4.1	
KZ448	36-72	5,12,12	15,1,1*	
KZ449	36-72	5,15,15	15,1,1*	

* 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.

Voltage Accuracy	± 1% Main, ± 3% Auxiliary
Voltage Adjustments	± 5% (Main Only)
Ripple	<1%
Noise (20 MHz)	<2%
Temperature Coefficient	.02%/°C
Transient Response	1mS 0.5% V Excursion
	60% Load ± 40%
Regulation Line/Load	± 1% Main, ± 2% Auxiliary
	20% Load to 100% Load
Isolation (Input-to-Output)	500Vdc
Isolation (Terminal-To-Case)	500Vdc
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

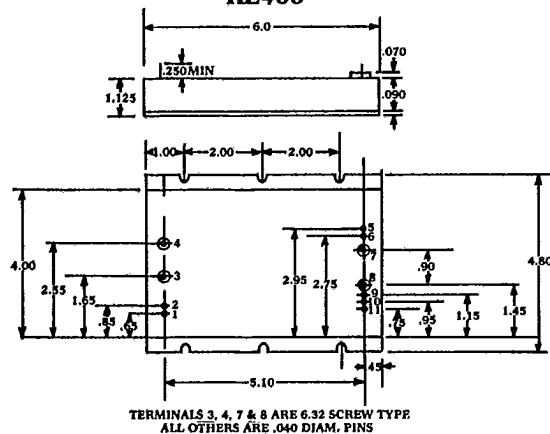
CONTACT OUR SALES APPLICATION DEPARTMENT WITH YOUR CUSTOM DESIGNS AND SPECIFICATIONS. AT INTRONICS WE ARE PREPARED TO RESPOND PROMPTLY TO YOUR NEEDS.

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

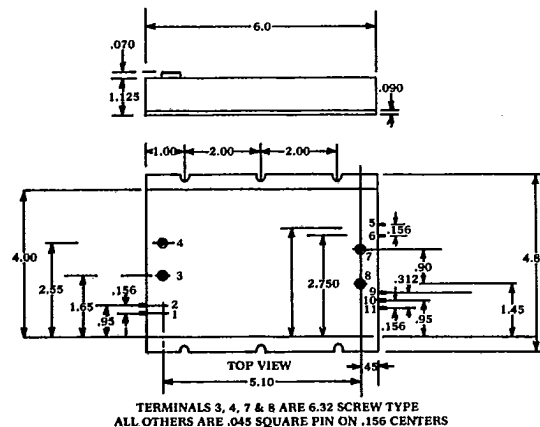
MECHANICAL OUTLINES AND CONNECTIONS

KZ400



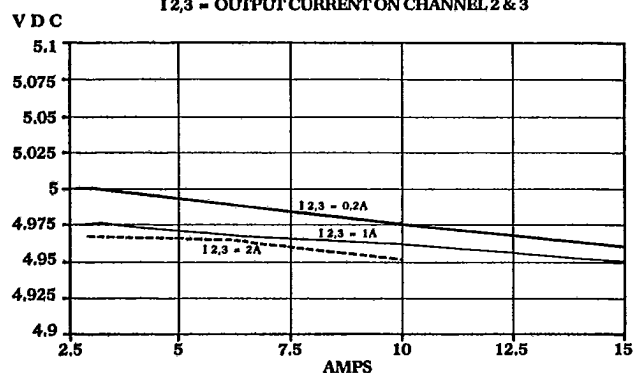
PIN	Connection
1	CASE
2	CONTROL
3	+VIN
4	-VIN
5	+V2
6	V2RTN
7	+V1
8	V1 RTN
9	+V3
10	V3 RTN
11	TRIM

KZ400 - SIDE MOUNT



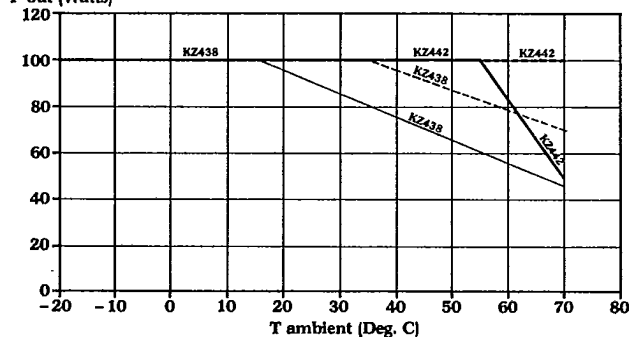
PERFORMANCE CURVES

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

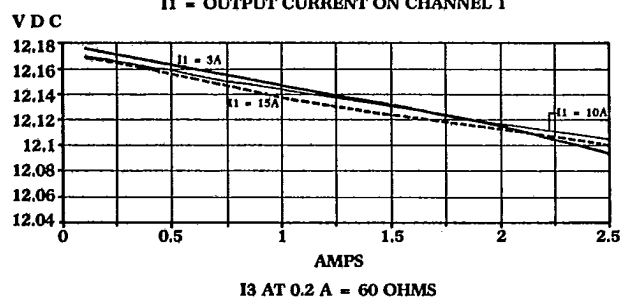


KZ400 SERIES
POWER DERATING CURVE

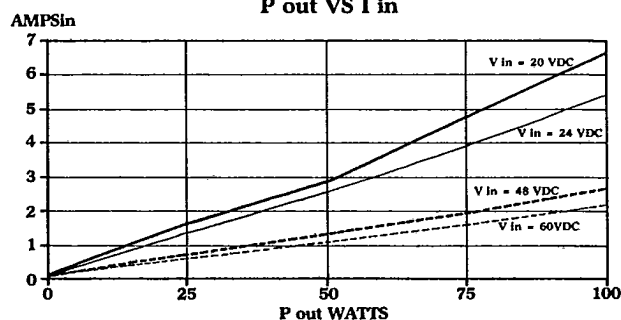
CONVECTION 200 LFM
P out (Watts)



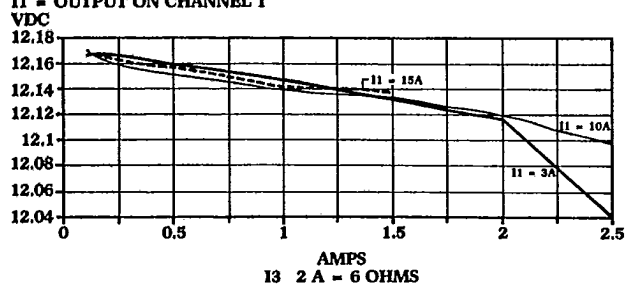
KZ 438
OUTPUT #2 REGULATION
I₁ = OUTPUT CURRENT ON CHANNEL 1



KZ 438
P out VS I in



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



KZ 438
%EFF VS P out

