

# Intronics

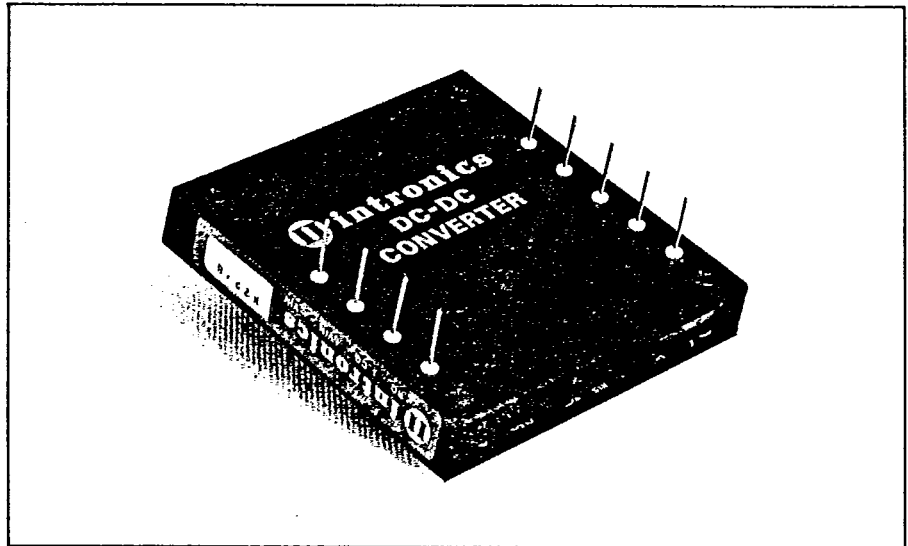
## KZ 200 SERIES 25 WATT DC-DC CONVERTERS

### FEATURES

- Current Mode Control
- 200 KHz Switching Frequency
- Remote Control Shutoff
- Adjustable Output Voltage
- Low Voltage Shutdown
- Available in two pin configurations

### APPLICATIONS

- Telecommunications
- Instrumentation
- Computers



Model	Input Range (VDC)	Output Voltages (VDC)	Output Current (AMPS)
KZ231	20-60	5	5.0
KZ232	20-60	12	2.1
KZ233	20-60	15	1.7
KZ238	20-60	5,12,12	4/0.5/0.5*
KZ239	20-60	5,15,15	4/0.5/0.5*
KZ241	36-72	5	5.0
KZ242	36-72	12	2.1
KZ243	36-72	15	1.7
KZ248	36-72	5,12,12	4/0.5/0.5*
KZ249	36-72	5,15,15	4/0.5/0.5*

\*Power limited to 25 watts.

Add suffix -00 or -01 to Model # for pin configuration  
i.e. KZ238-01. See Mechanical Outlines and Connections for details.

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

### GENERAL SPECIFICATIONS

Voltage Accuracy	± 1% Main, ± 3% Auxiliary
Voltage Adjustments	± 5% (Main)**
Ripple	<1%
Noise (<20 MHz)	<2%
Temperature Coefficient	.02%/°C
Transient Response	1mS 3% V Excursion (Typ.) 60% Load ± 40%
Regulation Line/Load	± 1% Main, ± 5% 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	5Vdc applied to Pin #1 with respect to Pin #4 will disable outputs

### FAULT PROTECTION

Reverse Polarity Protection	Yes (External fuse required)
Overvoltage Main	Yes
Short Circuit	Indefinite, Auto Recovery

### ENVIRONMENTAL

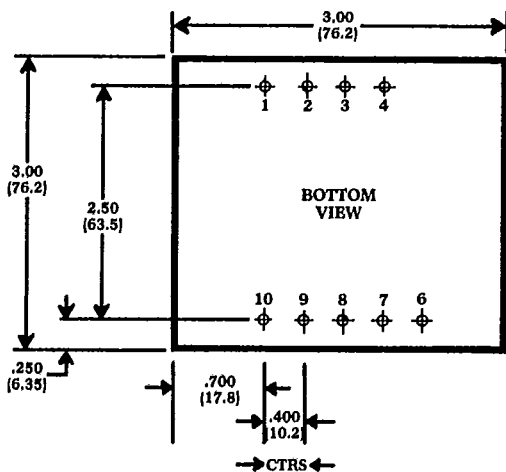
Operating Temperature	-20°C to 70°C, no derating.
Vertical mounting with natural convection cooling	
Storage Temperature	-40°C to 105°C

\*\*Auxiliary outputs will be affected

### TECHNICAL HIGHLIGHTS

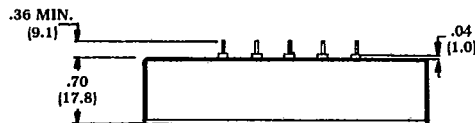
- Extra Fault Protection for Maximum Reliability
- Short Circuit Protection
- Six-Sided Shielding
- Advanced Thermal Management Techniques
- External Case Grounding
- Low Ripple and Noise

MECHANICAL OUTLINES AND CONNECTIONS

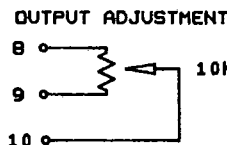


KZ 200 SERIES

Model # Suffix	-00	-01
CONNECTOR	PIN	PIN
control	1	1
case	2	2
+ V <sub>in</sub>	3	4
- V <sub>in</sub>	4	3
N P	5	5
- V <sub>aux</sub>	6	6
+ V <sub>aux</sub>	7	7
RTN	8	8
+ V <sub>main</sub>	9	9
TRIM	10	10



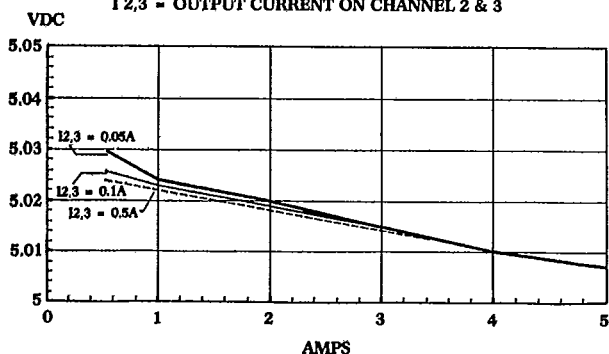
NOTES:  
 1. DIMENSIONS IN INCH (MM)  
 2. PIN TYPE: HALF-HARD BRASS, ELECTRO-TIN PLATED  
 DIAMETER: .04 (1.02)



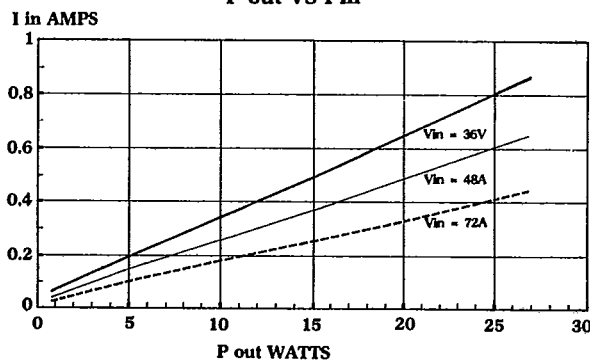
PERFORMANCE CURVES

KZ 238  
 OUTPUT #1 REGULATION

I<sub>2,3</sub> - OUTPUT CURRENT ON CHANNEL 2 & 3

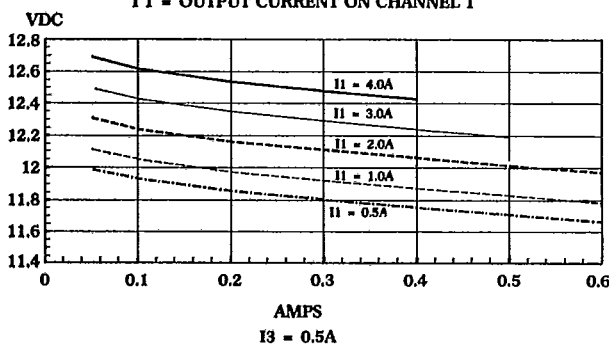


KZ 243  
 P out VS I in

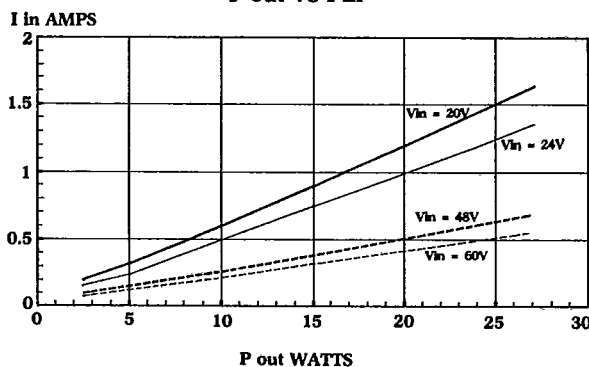


KZ 238  
 OUTPUT #2 REGULATION

I<sub>1</sub> - OUTPUT CURRENT ON CHANNEL 1

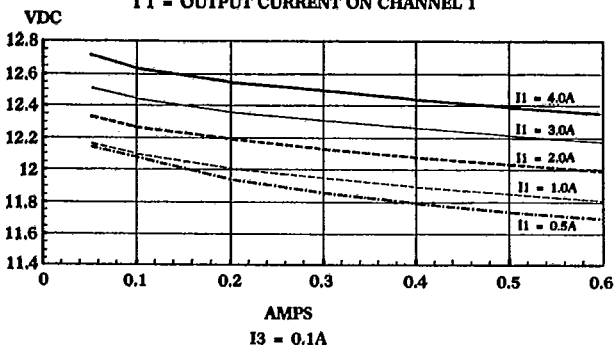


KZ 238  
 P out VS I in



KZ 238  
 OUTPUT #2 REGULATION

I<sub>1</sub> - OUTPUT CURRENT ON CHANNEL 1



KZ 238  
 P out VS % EFF

