



KZ 200 SERIES

25 WATT

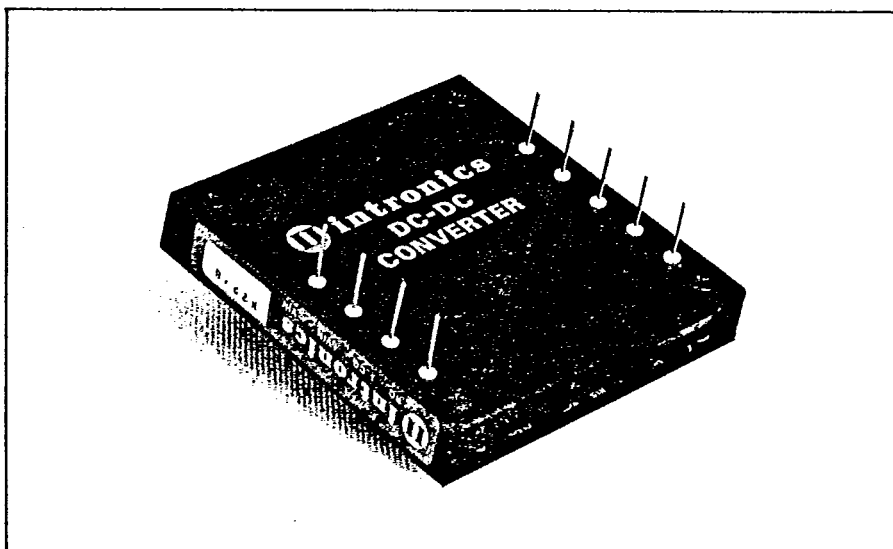
DC-DC CONVERTERS

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.)
Regulation Line/Load	60% Load ± 40%
	± 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

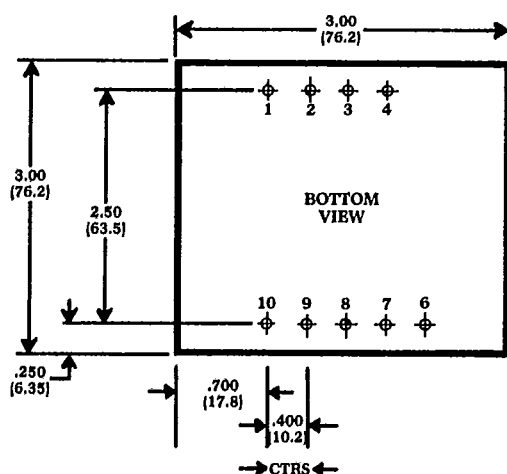
Operating Temperature	-20°C to 70°C, no derating.
Vertical mounting with natural convection cooling	
Storage Temperature	-40°C to 105°C

**Auxiliary outputs will be affected

TECHNICAL HIGHLIGHTS

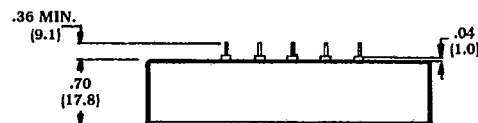
- Extra Fault Protection for Maximum Reliability
- Short Circuit Protection
- Six-Sided Shielding
- Advanced Thermal Management Techniques
- External Case Grounding
- Low Ripple and Noise

MECHANICAL OUTLINES AND CONNECTIONS



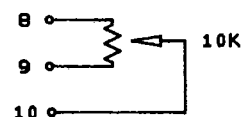
KZ 200 SERIES

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



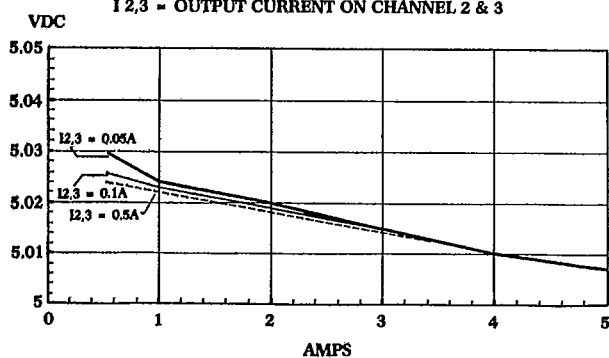
NOTES:
1. DIMENSIONS IN INCH (MM)
2. PIN TYPE: HALF-HARD BRASS, ELECTRO-TIN PLATED
DIAMETER: .04 (1.02)

OUTPUT ADJUSTMENT

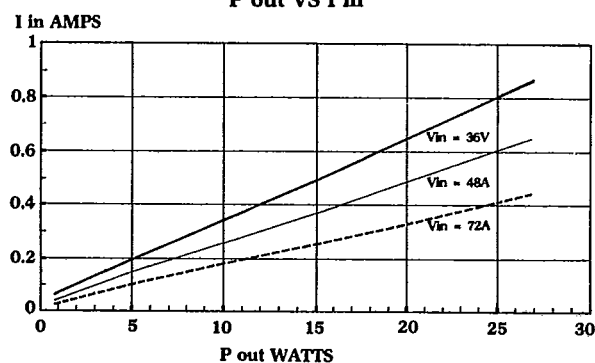


PERFORMANCE CURVES

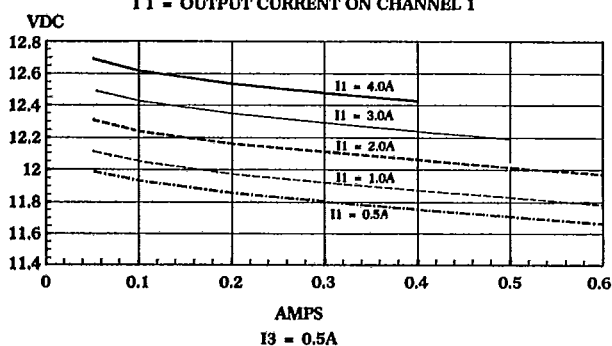
KZ 238
OUTPUT #1 REGULATION
I_{2,3} = OUTPUT CURRENT ON CHANNEL 2 & 3



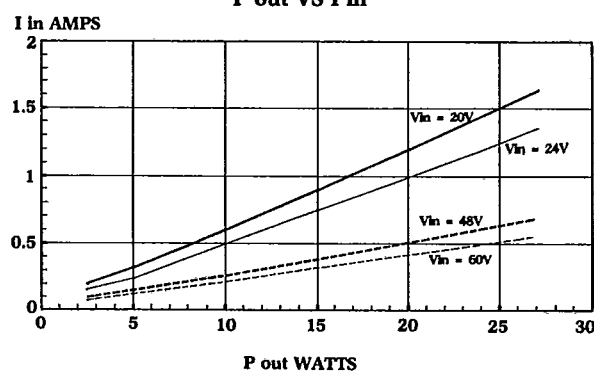
KZ 243
P out VS I in



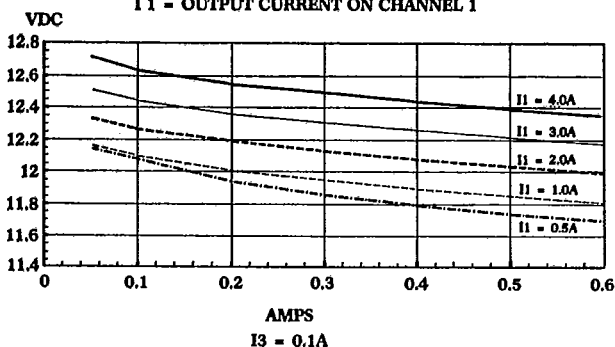
KZ 238
OUTPUT #2 REGULATION
I₁ = OUTPUT CURRENT ON CHANNEL 1



KZ 238
P out VS I in



KZ 238
OUTPUT #2 REGULATION
I₁ = OUTPUT CURRENT ON CHANNEL 1



KZ 238
P out VS % EFF

