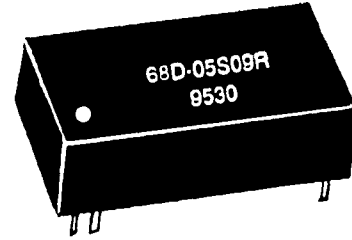


68D/69D SERIES WIDE RANGE DC/DC CONVERTERS 3 WATT MOSFET REGULATION

FEATURES

- 4:1 wide input voltages: 10–33, 18–72VDC
- Output voltages: 5, 12, 15, ± 5, ± 12, ± 15VDC
- High I/O isolation voltage
- MOSFET design, MOSFET Technik
- Case material: metal, black coating



GENERAL SPECIFICATIONS

- Output ripple & noise — 100mVp-p(20KHz B.W.)
- Isolation voltage — 68D SCR 500 VDC
- Isolation voltage — 69D SWR 1000 VAC
- Short circuit protection — Continuous

ELECTRICAL SPECIFICATIONS

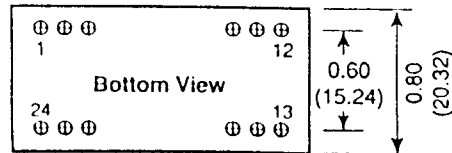
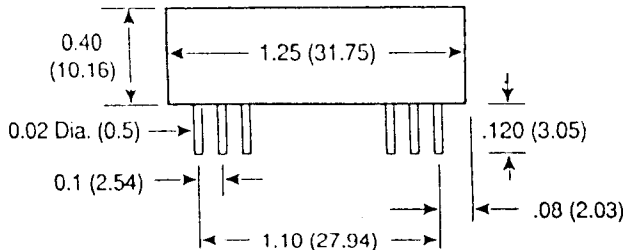
- Input voltage range — 10–33VDC, 24VDC nominal
- Input voltage range — 18–72VDC, 48VDC nominal
- Output voltage tolerance — ± 2%
- Line regulation — ± 0.5%
- Load regulation — (single) ± 5%
— (dual) ± 2%

(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Input Current (mA)	
				No Load	Full Load
68D/69D-24S05R	10–33	5	500	4	133
68D/69D-24S12R	10–33	12	250	4	158
68D/69D-24S15R	10–33	15	200	4	156
68D/69D-24D05R	10–33	± 5	± 250	4	132
68D/69D-24D12R	10–33	± 12	± 125	4	157
68D/69D-24D15R	10–33	± 15	± 100	4	155
68D/69D-24T05R	10–33	± 5	± 250	4	132
68D/69D-24T12R	10–33	± 12	± 125	4	157
68D/69D-24T15R	10–33	± 15	± 100	4	155
68D/69D-48S05R	18–72	5	500	2	65
68D/69D-48S12R	18–72	12	250	2	78
68D/69D-48S15R	18–72	15	200	2	77
68D/69D-48D05R	18–72	± 5	± 250	2	64
68D/69D-48D12R	18–72	± 12	± 125	2	77
68D/69D-48D15R	18–72	± 15	± 100	2	76
68D/69D-48T05R	18–72	± 5	± 250	2	64
68D/69D-48T12R	18–72	± 12	± 125	2	77
68D/69D-48T15R	18–72	± 15	± 100	2	78

* S: Single Output D: Dual Output T: Dual Separated

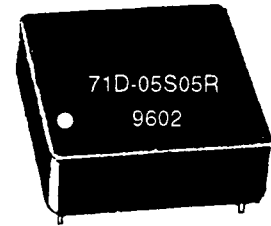
MARKINGS AND DIMENSIONS



71D SERIES 3 WATT REGULATED DC/DC CONVERTERS

FEATURES

- Up to 3 watts output power
- 1.3" × 1.3" package
- 2500VDC isolation
- Regulated output types



GENERAL SPECIFICATIONS

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩ min @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Efficiency (unregulated) — 70% typ.
- Short circuit protection — short term (10 sec. max.)

ELECTRICAL SPECIFICATIONS

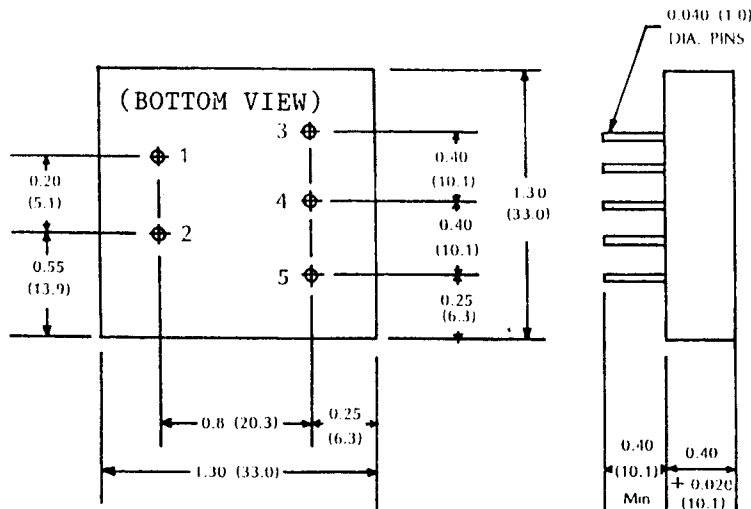
- Input voltage range — 2:1
- Output voltage tolerance — ± 3%
- Line regulation — ± 1%
- Load regulation — ±0.5%

(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Output Current (mA Typ.)
71D-05S05R	4.5 – 6.0	5	360	600
71D-05S12R		12	200	800
71D-05S15R		15	100	500
71D-05D12R		± 12	± 100	800
71D-05D15R		± 15	± 50	800
71D-12S05R	9 – 18	5	300	240
71D-12S12R		12	200	270
71D-12S15R		15	100	290
71D-12D12R		± 12	± 120	290
71D-12D15R		± 15	± 50	290

S: Single Output D: Dual Output

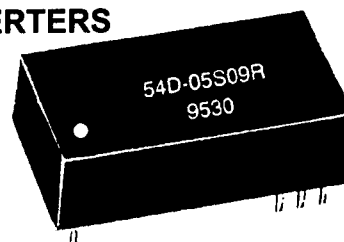
MARKINGS AND DIMENSIONS



54D SERIES 3 WATT 24 PIN DIL DC/DC CONVERTERS

FEATURES

- Up to 3 watts output power
- 24 pin DIL package
- 500 VDC isolation
- Unregulated and regulated output types



GENERAL SPECIFICATIONS

- Output ripple & noise — 50mVp-p(20KHz B.W.)
- Isolation resistance — 100MΩmin @ 500VDC
- Switching frequency — 20KHz min
- Operating temperature — 0°C to 70°C
- Efficiency (unregulated) — 70% typ.
(regulated) — 50% typ.
- Short circuit protection — continuous

ELECTRICAL SPECIFICATIONS

- Input voltage range — ± 10%
- Output voltage tolerance — ± 5%
- Line regulation — unregulated: ± 1.2%
— regulated: ± 0.3%
- Load Regulation — unregulated: ±10%
— (regulated): ± 0.5%

(typical at nominal input, rated load and 25°C unless otherwise specified.)

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%Typ.)
54D-05S05R	5	5	600	50
54D-05S09N	5	9	300	75
54D-05S12R	5	12	250	55
54D-05S15N	5	15	200	75
54D-05D12N	5	± 12	± 120	75
54D-05D15R	5	± 15	± 100	55
54D-12S05N	12	5	600	75
54D-12S09R	12	9	300	55
54D-12S12N	12	12	250	75
54D-12D12R	12	± 12	± 120	55
54D-12D15N	12	± 15	± 100	75

S: Single Output D: Dual Output R: Regulated N: Unregulated

MARKINGS AND DIMENSIONS

