

MODEL:- II-051

30AMP Diode-OR Module for dual redundant Power Supplies

GENERAL DESCRIPTION

The II-051 Diode-OR, using power MOSFET technology, is a high efficiency alternative to the conventional Schottky diode based modules. The very low on resistance of the MOSFETs limits the typical dissipation to typically 1.25W at 30A and less than 1.65W (worst case) at an ambient of 60C. The unit can withstand 180A current surges for 10ms. The II-051 requires a 0V reference for correct operation (from the input power supplies). It is essential that this 0V reference be connected otherwise the unit will dissipate an excessive and damaging amount of heat.

The II-051 has four (4) LED indicators:- Input 1 OK | Input 2 OK | Output Available | Internal Fault

The Internal Fault activates an alarm relay.

The unit generally complies with the requirements of CISPR22, IEC61000 and the design recommendations of IPC2221.



FEATURES

- ◆ Wide operating supply voltage range 10-55V.
- ◆ Very low forward volt drop.
- ◆ Very low heat dissipation at 30A per input.
- ◆ Very low reverse leakage current (< 100uA).
- ◆ Wide ambient operating temperature range.
- ◆ Fault alarm relay with C/O contacts.
- ◆ MTBF at 65C 203,403 hrs

TECHNICAL DATA

Input Voltage	+10 to 55V (dc + ac peak).
Input Current (per input)	30A maximum continuous 60A max short term overload
Leakage Current:	Typically <100uA at 60C.
Output Current:	55A continuous 75A short term overload
Other Outputs:	LED Indicators showing Input 1 OK Input 2 OK Output Available Healthy
Internal Fault	Healthy LED 'OFF' relay is de-energised and drops out.

GENERAL SPECIFICATION

Input Voltage	10-55V dc + ac peak
Leakage Current	<100uA at 60C
Reference Current	Less than 11mA at 24V
Controls	Nil
Indicators	4 x Red LEDs
Operating Temp	0 to 70 Deg C
Storage Temp	0 to 85 Deg C
Terminals (Current)	Self-opening 16mm
Terminals (Reference)	Self-opening 4mm
Housing material	Powder Coated Mild Steel
Mounting Style	DIN Rail
Dimensions	See drawing below.
Weight	250 grams.

