



Leakage

DESCRIPTION:

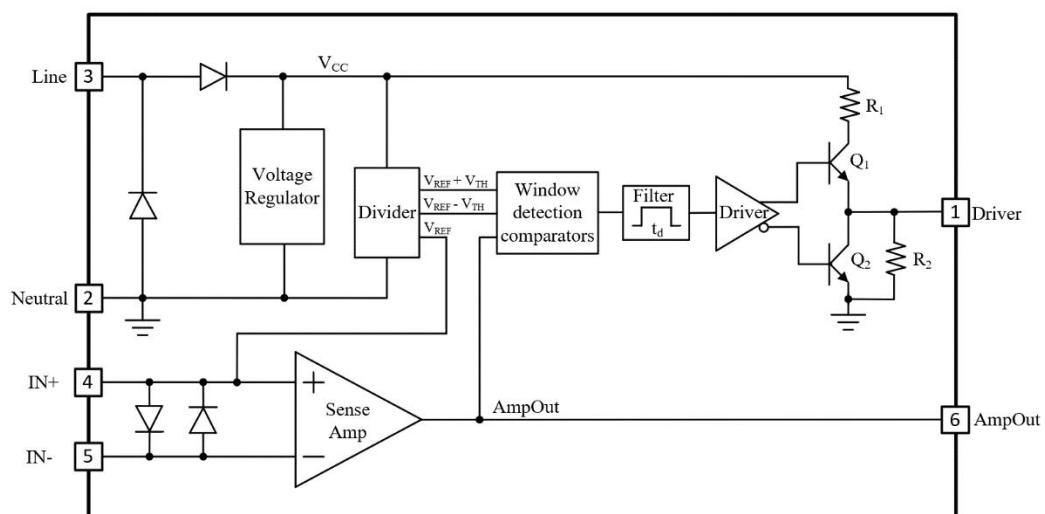
MAIN FEATURES

- Built In Half Wave Rectification And Power Supply Voltage Stabilizing Module
- Low Offset Amplifier
- Bidirectional Threshold Comparator
- Anti Interference Delay
- Under voltage Protection
- Adjustable Detection Sensitivity
- SOT23-6 Package
- Meets UL 943B Requirements
- Suitable For Various Voltage Systems

Application

- ◇ RCD

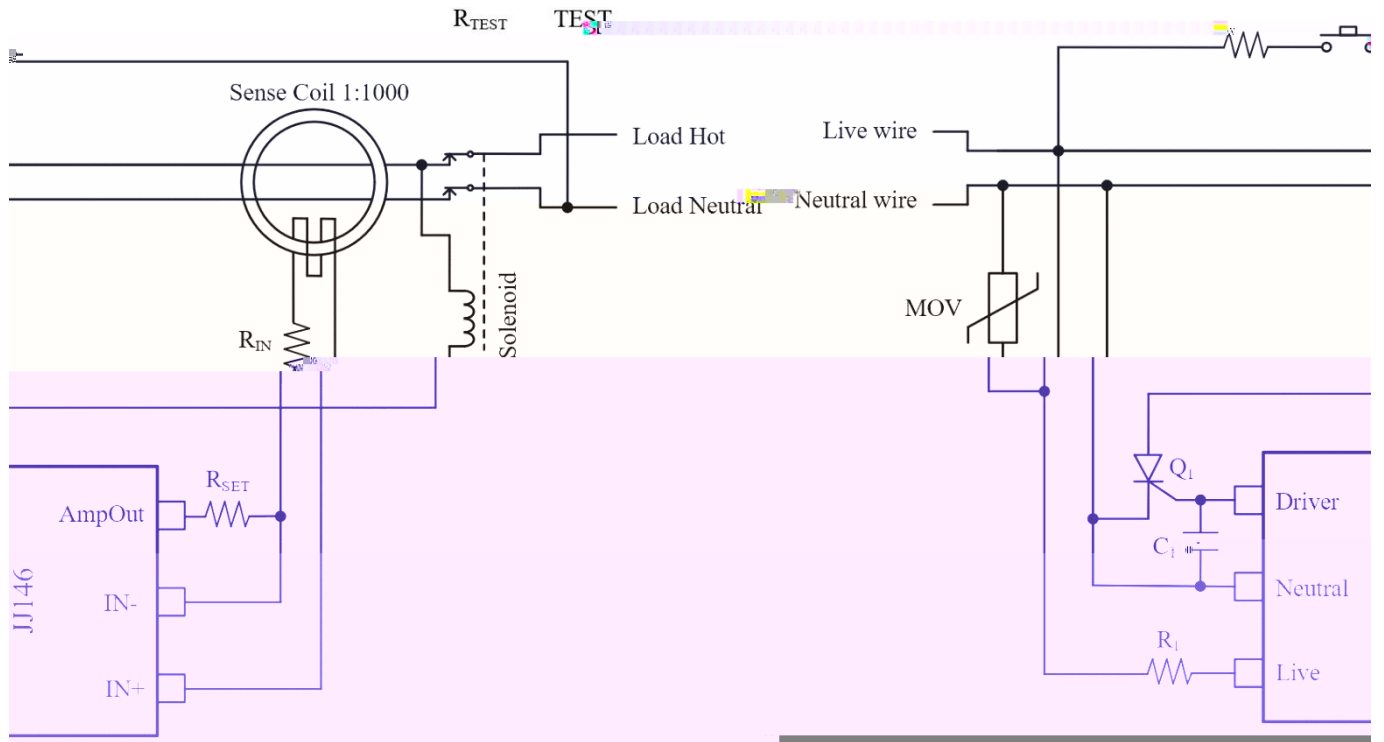
Block Diagram







Typical Applications



Load Hot

Neutral wire



Functional Description

RCD

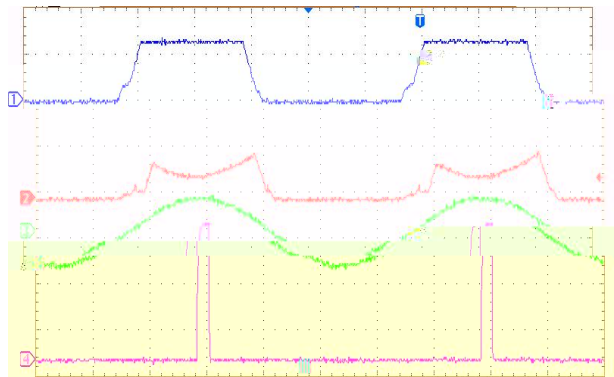
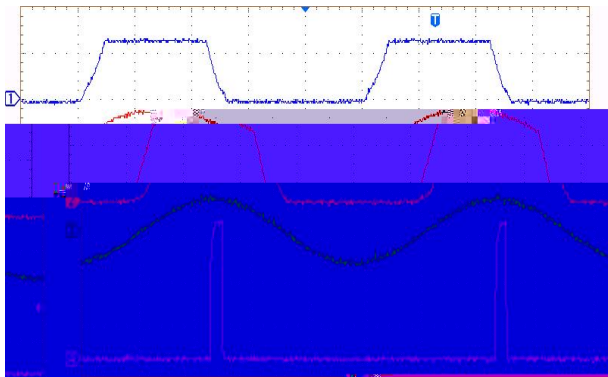
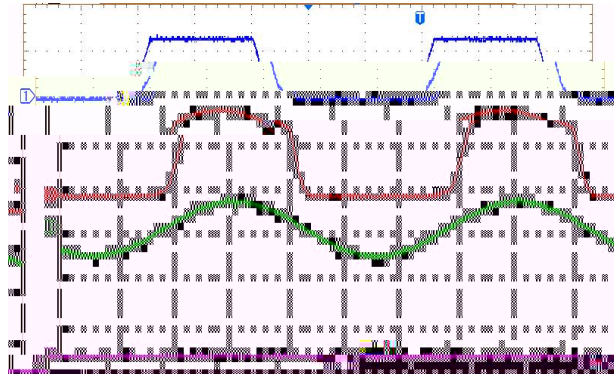
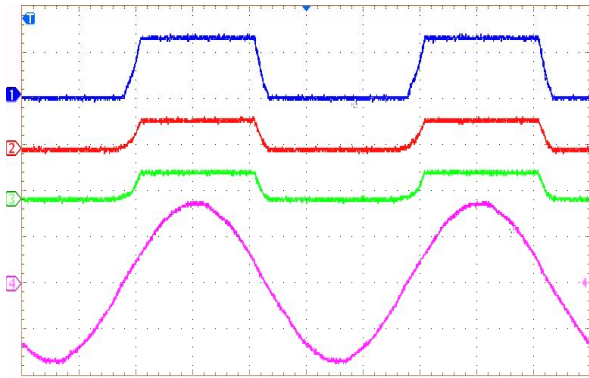


 Calculation of RSET Resistor

$$R_{SE} = \frac{I_{FA L} \cdot N}{\overline{P}}$$

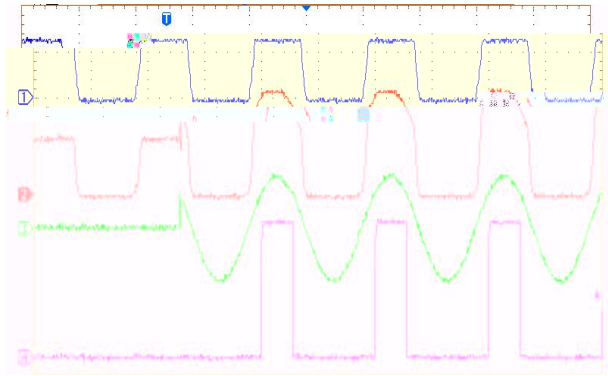
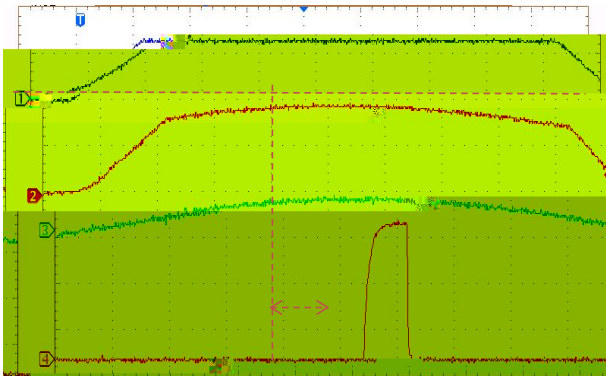
Calculation of VOS Trip Threshold Error

$$\frac{OS}{IN} = \frac{SE}{DC \cdot AC}$$

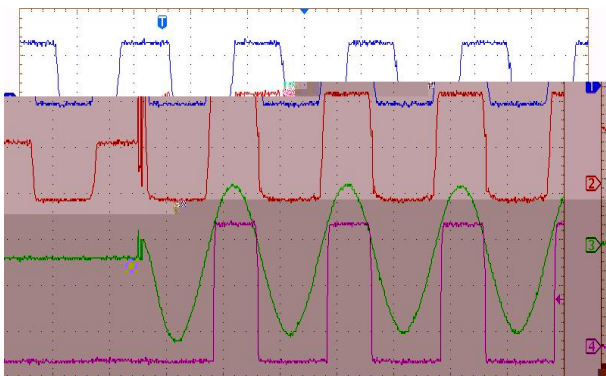




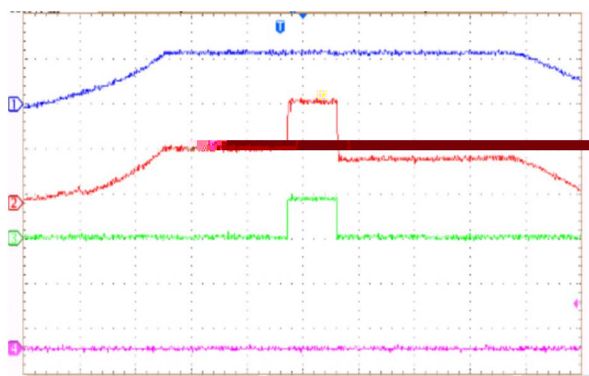
15K Ground Fault



500 Ground Fault



Internal Filter Delay (Fault Time < 1ms)



CH1: V_{LIVE} (13V/DIV)
 CH2: Ampout (5V/DIV)
 CH3: I_{FAULT} (20mA/DIV)
 CH4: Driver (1V/DIV)
 Time: 1ms/DIV
 Fault time is slightly less than 1ms,
 Driver not triggered.