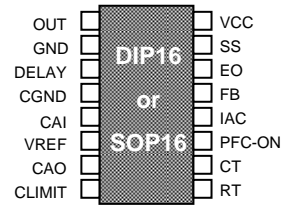
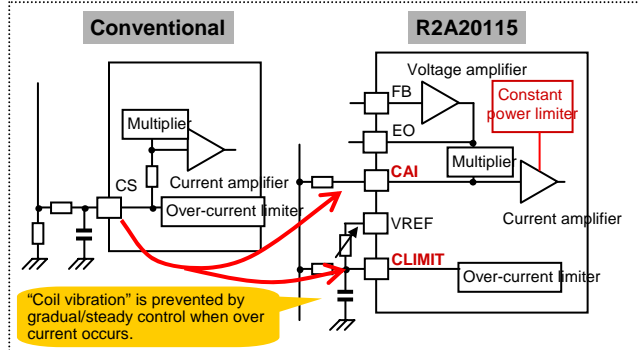


Features

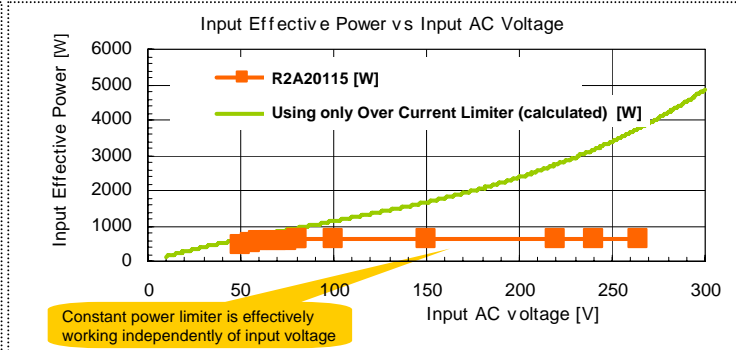
- **No reference voltage adjustment resistor** is needed with higher accurate built-in circuit (+/-1.6%) than previous products (+/-2%).
- **No margin for inductor design** is needed with higher accuracy of detect level of the built-in over current protection circuit. (Previously, the margin can not be omitted for its lower accuracy)
- **Prevention of "coil vibration"** at starting-up or over current period by the function of power limiter. (Previously, it's not supported)
- **The function of power limiter cuts down unnecessary power** supplied to the next stage. (Previously, the higher AC input voltage is applied, the higher power can be supplied to the next stage, of which power supply might be heavily loaded unnecessarily.)
- **Prevention of overshoot** on output voltage by dynamic OVP function without specific Pins. (Previously, this function is not supported or partly supported using specific Pins)
- **Power dissipation is cut down by 35%** of comparable products.
- **Easy system design** by using calculation sheet in Excel format provided for customers.



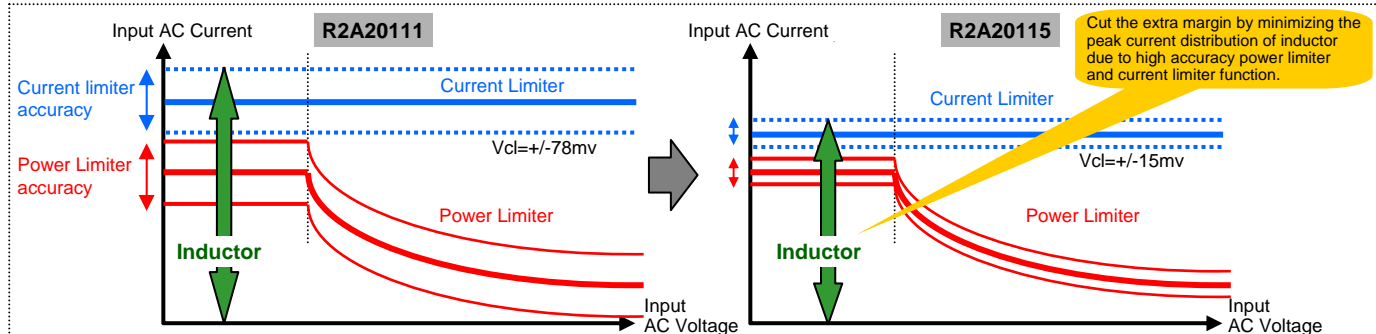
1-1. Introduction of Constant Power Limiter Using Current Monitoring and Setting Pins Separately



1-2. Introduction of Constant Power Limiter and Reduction of Needless Device Margin by the Improvement of it's Accuracy

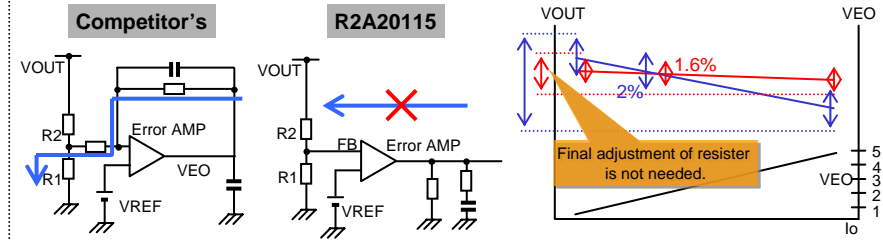


1-3. Reduction of Maximum Current in Boost Inductor by Improved Accuracy of Power Limiter and Current Limiter

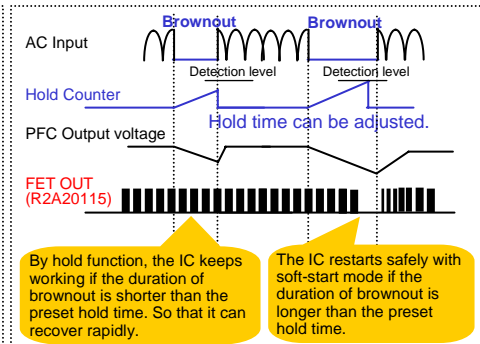


2. Improvement of Load Regulation by Utilizing gm AMP in Feedback Loop

In case voltage amplifier is feedback type, the current via feedback resistor influences load regulation. By using gm amplifier, there is no current path in the circuit. So that, load regulation can be improved. Additionally, contributed by the improvement in accuracy of circuit (2% to 1.6%), the resistor to adjust the reference voltage becomes unnecessary.

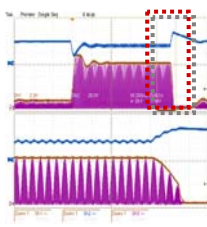
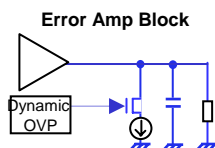


3. Hold Function at Brownout



4. Prevention of "Coil Vibration" and Overshooting Contributed by Dynamic OVP

The IC newly integrates Dynamic OVP circuit, which limits peak current by making the width of OUT pulse narrower gradually and then prevents over voltage, when over voltage is detected, in addition to Static OVP circuit, which stops the output pulse. Even if overshooting occurs in transition period, such as the period of start-up or sudden variation of load, Dynamic OVP keeps the output pulse on, so that, "coil vibration" can be prevented.



Operations just after sudden variation of load <0.1A-1.3A>

