

Ultra-Low Quiescent Current LDO with Enable

The AP7351D is a low-dropout regulator with high-output voltage accuracy. The AP7351D includes a voltage reference, error amplifier, current-limit circuit, and an enable input to turn it on/off. With the integrated resistor network, fixed-output voltage versions can be delivered.

With its ultra-low typical quiescent current of $0.5\mu\text{A}$, 60dB PSRR, and miniature package dimensions, the AP7351D is well-suited for low-power, handheld wearable devices and other battery-operated devices that require an extended time period before a new battery replacement.

The AP7351D is available in industrial standard X2-DFN1010-4 and SOT25 packages.



DIODES Advantage

The AP7351D offers ultra-low quiescent current for extended battery lifetime for wearable applications.

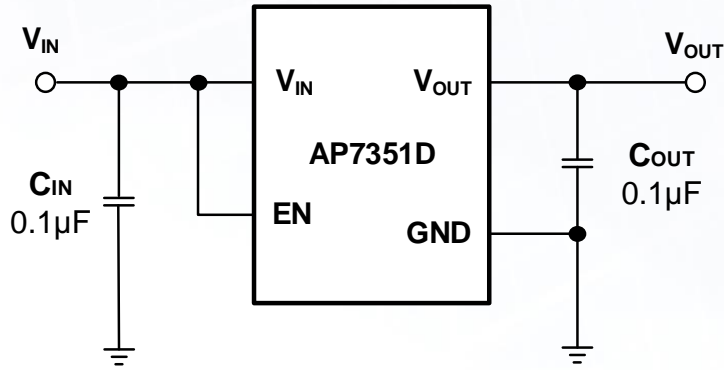
- **Lowest Quiescent Current at $0.5\mu\text{A}$ with Standby Current $0.02\mu\text{A}$**
Leads to extended battery life for applications where power must be conserved
- **High PSRR (60dB @ 1kHz) and Low Noise ($32\mu\text{Vrms}$ @ 10Hz - 100kHz)**
Suitable for noise-sensitive applications, such as audio, video, and RF subsystems, which require power saving in low-power and battery-operated products
- **1.0% Output Accuracy at Room Temperature, 2% over -40°C to $+85^\circ\text{C}$**
Maintains accuracy under all conditions
- **Active Output Discharge with Wide Variety of Output Voltages**
Provides 150mA for I/O and numerous core voltages with output discharge to ensure systems start-up in known state
- **With OTP and Short-Current Limit Protection with Wide Variety of Output Voltages**
Overtemperature protection and short-circuit current foldback provides a ruggedized solution

Application

- Portable Instrumentation
- Wearable Electronics
- Internet of Things (IoT)
- Image Sensor



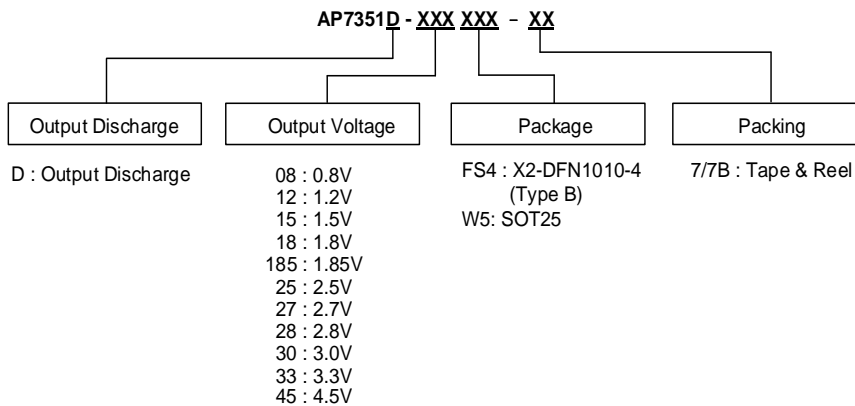
Typical Application Circuit



Product Portfolio

Part Number	V _{IN} (V)	V _{OUT} (V)	I _{OUT} (mA)	V _{DROP} @ Full Load (mV)	I _Q (μA)	Output Accuracy (%)	Enable	Package
AP7351D-XXXFS4-7B	1.4 to 5.5	0.8 to 4.5	150	0.14V	0.5	1	Yes	X2-DFN1010-4 (Type B)
AP7351D-XXXW5-7	1.4 to 5.5	0.8 to 4.5	150	0.14V	0.5	1	Yes	SOT25

Ordering Information



To find out more information:

<https://www.diodes.com/part/AP7351D>