



New Product Announcement

AP65355
AP65455

3A/4A Adaptive COT Synchronous DC-DC Buck Converters

The AP65355/AP65455 are adaptive constant on-time (aCOT) mode synchronous buck converters providing high efficiency, excellent transient response and high DC-output accuracy for voltage regulation in digital TVs and monitors.

The aCOT control scheme handles wide input/output voltage ratios and provides a low external component count. The AP65355/AP65455 supports a seamless transition between continuous conduction mode (CCM) at higher load conditions and discontinuous conduction mode (DCM) at lighter -load conditions for high efficiency.

The AP65355/AP65455 operate at a fixed 650KHz to achieve good output stability.

These devices also feature programmable soft-start, UVLO, OTP, high-voltage tolerance EN Pin and OCP to protect the circuit.

The AP65355/AP65455 are available in DFN3030-10.



The Diodes' Advantage

- **Synchronous DC-DC Buck Converter with Continued Load Current of 3A/4A**
 - Increases efficiency in light -load condition
 - Standard industry pin-out
- **Protection**
 - Overcurrent protection
 - Thermal shutdown
 - UVLO & high voltage tolerance EN pin
 - Improves robustness of circuit and prevents premature failure
- **Adaptive COT Mode**
 - Fast transient response
 - No need for external compensation

Applications

- Game Consoles
- TVs and Monitors
- Set-Top Boxes
- Network Systems
- Distributed Power Systems
- Home Audio
- Consumer Electronics
- Green Electronics

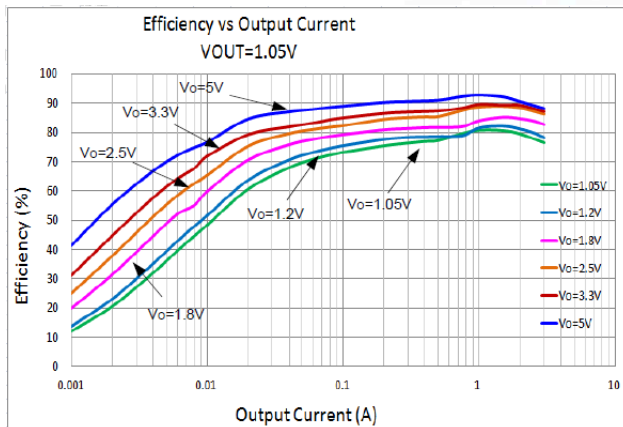
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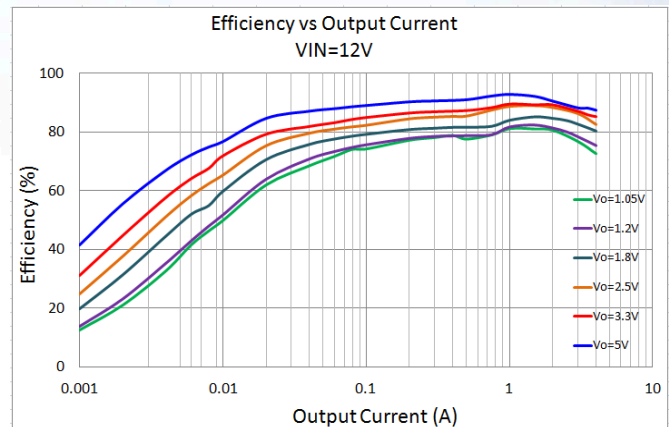


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AP65455



Product Portfolio

Part	Min. Input Voltage (V)	Max. Input Voltage (V)	Output Voltage (V)	Output Current (A)	Frequency (kHz) typ	Internal Vref (V) typ	Efficiency (%)	Standby Quiescent Current (mA) typ	Operating Ambient Temp Range (°C)	Features							Available Packages
										Enable Pin	Current Limit Protection	Thermal Shutdown	Adjustable Output Voltage	Under voltage Lockout	Programmable Soft-start	Power Good	
AP65355	4.5	18	0.76~6	3	650	0.765	92	0.6	-40 to +85	Y	Y	Y	Y	Y	Y	Y	DFN3030-10
AP65455	4.5	18	0.76~6	4	650	0.765	92	0.6	-40 to +85	Y	Y	Y	Y	Y	Y	Y	DFN3030-10

Ordering Information

Device	Packaging	Reel Size	Quantity
AP65355FN-7	DFN3030-10	13"	2,500
AP65455FN-7	DFN3030-10	13"	2,500