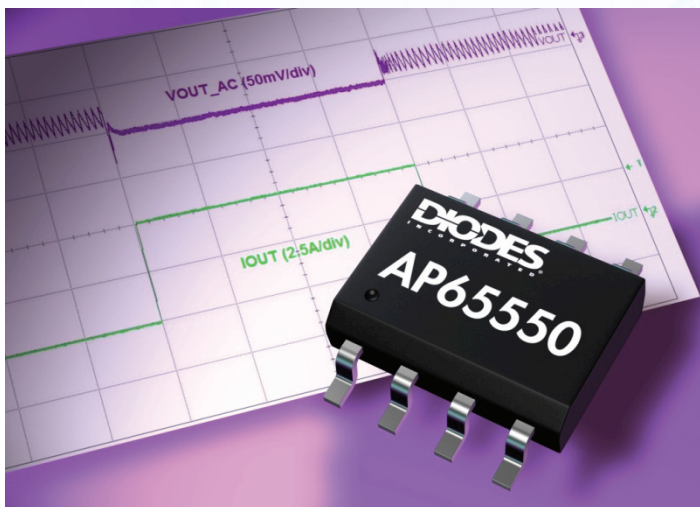




5A 18V, 650kHz Adaptive COT Buck Converter

The AP65550 is an Adaptive Constant On-Time mode synchronous buck converter providing high efficiency, excellent transient response and high DC output accuracy for low-voltage regulation in digital TV, monitors and other point of load systems.

- The constant-on-time control scheme handles wide input/output voltage ratios and provides low external component count.
- The internal proprietary circuit enables the device to drive low ESR output capacitors, such as SP-CAP or POSCAP and ultra-low ESR ceramic capacitors.
- Discontinuous Current Mode allows AP65550 maintain high efficiency at light load conditions.
- It is available in the thermally enhanced SO-8EP package



The Diodes Advantage

- **5A Adaptive COT DC-DC Buck converter**
 - continued load current of 5A
 - Fixed Frequency Emulated Constant On-time Control
 - Excellent load transient response
 - Increases efficiency in light load condition
- **Thermally enhanced standard SO-8EP package**
Reduced junction temperatures at high ambient temperatures
- **Wide range of protection features**
 - Over Current Protection with hiccup
 - Thermal Shutdown
 - Improves robustness of circuit and prevents pre-mature failure

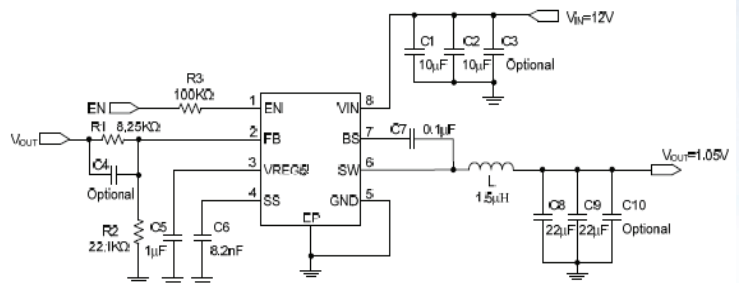
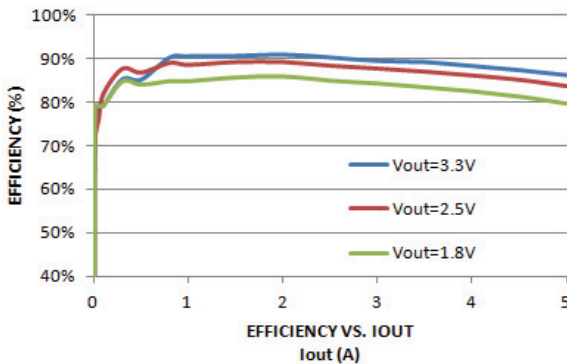
Applications

- Game Consoles
- TV and Monitors
- Set-top Box
- Network Systems
- Distributed Power Systems
- Home Audio
- Consumer Electronics
- Green Electronics



5A 18V, 650kHz Adaptive COT Buck Converter

AP65550



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 (uA) typ	Operating Ambient Temp Range (°C)	Features						Available Packages
										Enable Pin	Current Limit Protection	Thermal Shutdown	Adjustable Output Voltage	Under Voltage Lockout	Programmable Softstart	
AP65550	4.5	18	0.76V to 6V	5	650	0.765	92	3	-40 to +85	X	X	X	X	X	X	SO-8EP

Ordering information

Device	Packaging	\$ @ 250k	Reel Size	Quantity
AP65550SP-13	SO-8EP	0.65	13"	2500

To find out more information

AP65550

Datasheet <http://www.diodes.com/datasheets/AP65550.pdf>

Product Page http://diodes.com/catalog/buck_converter_57/ap65550.html