

## High Performance Synchronous Rectifier IC

## Product Description

DK5V100RXXST1 is a simple but high efficiency synchronous rectifier IC with only two function pins A-K, corresponding A-K pins of Schottky diode. With 100V power NMOS integrated, it can significantly reduce the conduction loss of traditional Schottky diode and improve the overall efficiency. It can replace the same specifications of Schottky rectifier diodes currently on the market.

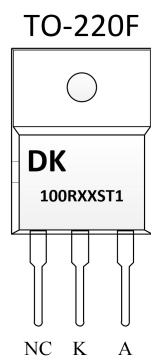
## Typical Applications

- USB Charger
- Adapter
- LED Driver, etc.

## Main Features

- Suitable for fly-back PSR/SSR applications
- Ultra low VF
- Ultra low temperature rise
- 100V XXmΩ NMOS integrated
- Support CCM&DCM&QR fly-back mode
- Patented self-power supply, no need of external power supply component
- With intelligent detection system, no need of front-end synchronization signal
- Improve EMC/EMI effect
- Replace Schottky Diode directly
- No need of external components

### Package/Order Information



Product Model	Package Type	Typical Power
DK5V100R05ST1	TO-220F	12V, 5.5A
DK5V100R10ST1	TO-220F	12V, 5A
DK5V100R15ST1	TO-220F	12V, 4A
DK5V100R20ST1	TO-220F	12V, 3A
DK5V100R25ST1	TO-220F	12V, 2.5A

Remark: Test typical power in closed environment @45°C ambient temperature.

### Function Structure Diagram

