

## Precision Load Switch with Adjustable Current Limit

### DESCRIPTION

The ETA6020 is a load switch which provides full protection to systems and loads which may encounter large current conditions. ETA6020 offers a  $95\text{m}\Omega$  current-limited switch which can operate over an input voltage range of 2.5-5.5V. The current limit can be externally programmed by a precision resistor, ranges from 75mA to 1.7A. Switch control is by a logic input (EN) capable of interfacing directly with low voltage control signals. Current is prevented from flowing when the switch is off and the output voltage is higher than the input voltage. ETA6020 also features thermal shutdown protection which shuts off the switch to prevent damage to the part when a continuous over-current condition causes excessive heating. When the switch current reaches the current limit, the parts operate in a constant-current mode to prohibit excessive currents from causing damage. The ETA6020 will not turn off after a current limit fault, but will rather remain in the constant current mode indefinitely. The nFAULT output asserts low during over-current and reverse-voltage conditions.

ETA6020 is housed in a tiny DFN2x2-6L package

### APPLICATION

- USB ports/Hubs
- Hot Swaps
- Cellphones
- Tablet PC
- Set Top Box
- PC motherboard
- Handheld Devices

### FEATURES

- Up to 1.5A Max Load current
- Accurate Current-limit threshold:  $\pm 5\%$
- Programmable Current-limit : 75mA to 1.7A
- Fast Over-Current Response
- Fault Flag Output: nFAULT Pin
- Reversed Current blocking
- Thermal Shutdown, UVLO protection
- Tiny DFN2x2-6L Package

### ORDERING INFORMATION

PART	PACKAGE PIN	TOP MARK
ETA6020D2G	DFN2x2-6	BDYW └─┬─ Date Code └─┬─ Product Number
ETA6020S2G	SOT2x3-6	

### TYPICAL APPLICATION

