

DC Power Input Considerations

Reverse Input Polarity

The DC-DC Converters are not internally protected against application of reverse polarity. However, if reverse polarity is applied to the input pins, the shunt body diode of the switching FET will conduct. The current rating of the FET shunt body is approximately 1 Ampere for the smaller converters ranging upward to 10 Amperes for the 80 watt parts. The input control circuits are protected against reverse polarity by a series rectifier. The input capacitors are non-polarized. If an external rectifier is used in series with the DC input lines, care must be taken to avoid peak detection of the input capacitors when external spikes such as CS06 waveforms are applied. This can happen with low power units operating with a light load. In this case, the voltage on the input filter capacitors can stairstep up to destructive levels.