



Measurements

ON Semiconductor[®]



Measurements - 1

Discrete diode bridge not powered by PoE, far a way from heat source

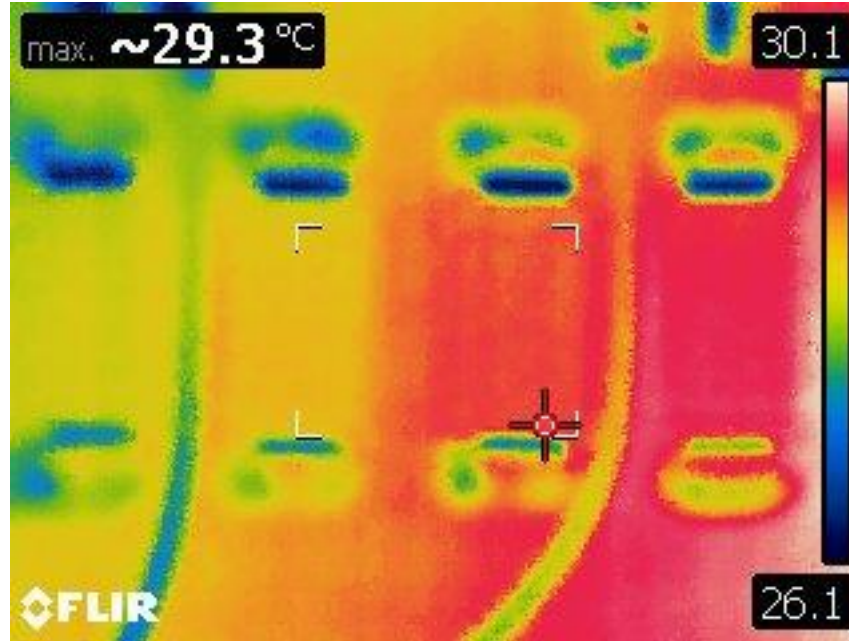
$V_{bfd} = 6.73\text{mV} @ 10\text{V}$

$V_{bfd} = 47.2\text{mV} @ 57\text{V}$

3P Reflected voltage over $100\text{k}\Omega$:

113mV and $123\text{mV} @ 10\text{V}$

57V : 2.12V and $2.4\text{V} @ 57\text{V}$



Perfectly OK for the existing backfeed voltage specification with huge margin:

$0.0472\text{V} \ll 2.8\text{V}$

Coming close to the limit if 3P reflected voltage would be extended to a high voltage.

Measurements - 2

Discrete diode bridge not powered by PoE, closer to heat source

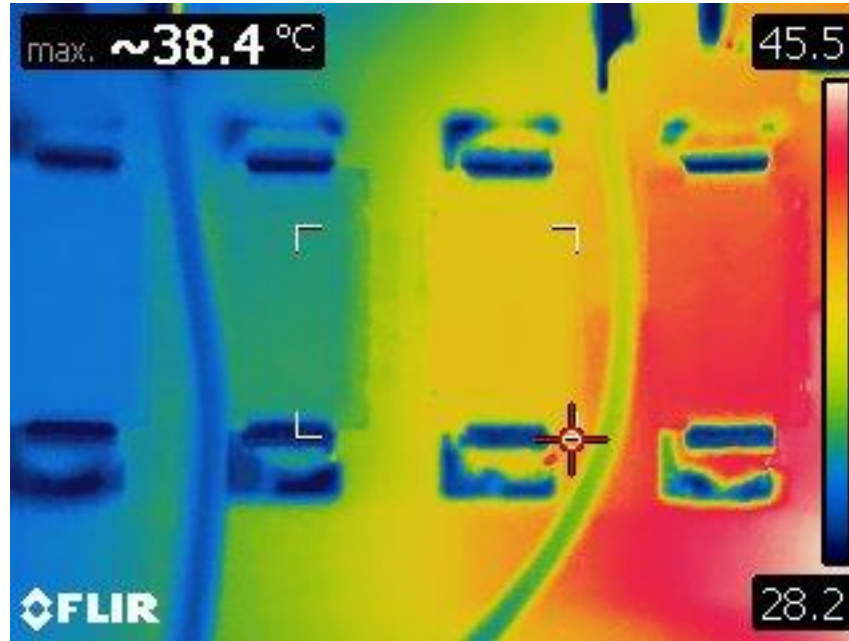
$V_{bfd} = 7.65\text{mV} @ 10\text{V}$

$V_{bfd} = 33.4\text{mV} @ 57\text{V}$

3P Reflected voltage over $100\text{k}\Omega$:

108mV and $127\text{mV} @ 10\text{V}$

2.4V and $3.34\text{V} @ 57\text{V}$



Perfectly OK for the existing backfeed voltage specification with huge margin :

$$0.0334\text{V} \ll 2.8\text{V}$$

Would go above the limit if 3P reflected voltage would be extended to a high voltage.