AVTECH ELECTROSYSTEMS LTD.
NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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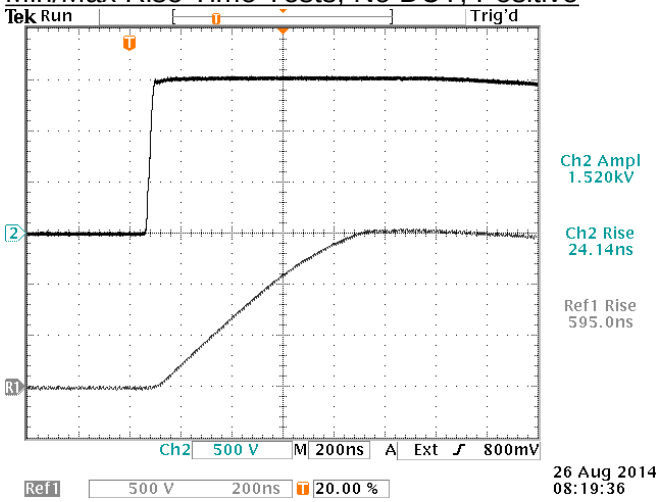
CANADA K2C 3H5

PERFORMANCE CHECKSHEET

Model: AVRQ-4-B-VXI-AC03
Type: Common Mode Transient Immunity (CMTI) Test for Opto-Couplers
S.N.: 13197
Date: August 26, 2014

Min/Max Rise Time Tests, No DUT, Positive



Top: minimum rise time setting, +1.5 kV
Bottom: maximum rise time setting, +1.5 kV

a) Output Signal Amplitude: ±1 kV, ±1.5 kV

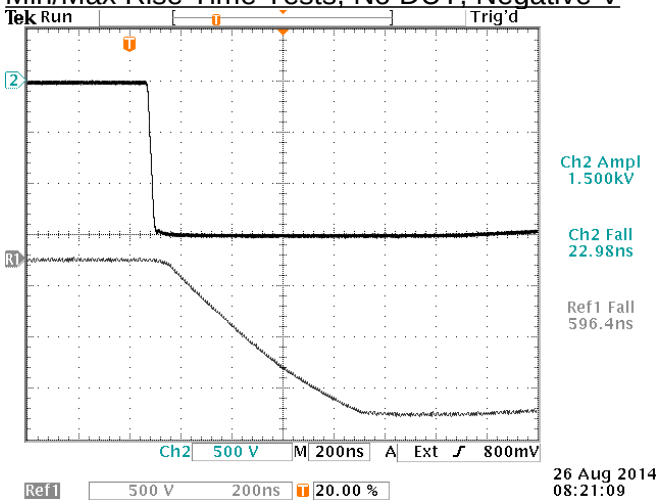
b) Rise Time (10%-90%): 25 ns - 250 ns

c) PRF: 1 Hz - 10 Hz

d) Jitter, Stability: OK

e) Prime Power: 100-240V AC, 50-60 Hz.

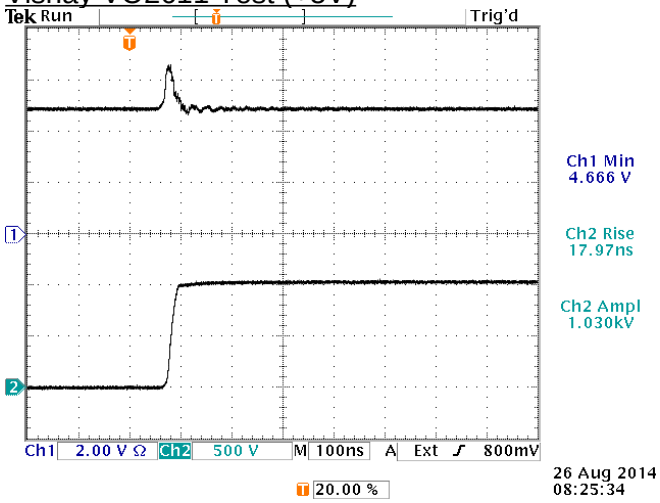
Min/Max Rise Time Tests, No DUT, Negative V



Top: minimum rise time setting, -1.5 kV
Bottom: maximum rise time setting, -1.5 kV

References levels: 10%, 90%.

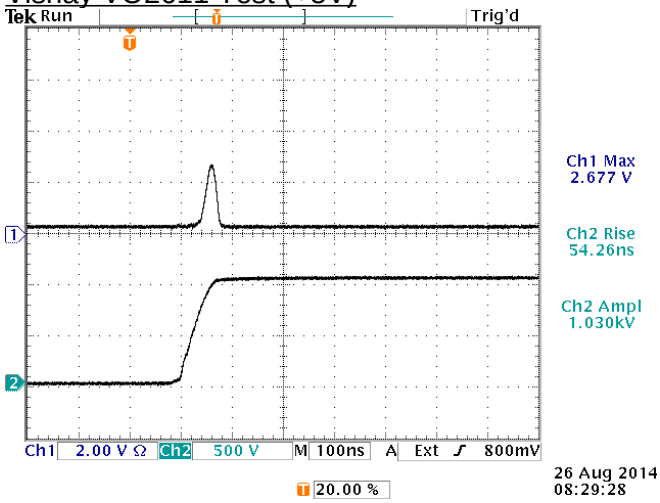
Vishay VO2611 Test (+5V)



+1kV, +5V, 0 mA, 348Ω load (“A” PCB).

No glitches at minimum risetime, so the CMTI exceeds (1kV × (90% - 10%) / 17.97 ns) = 44.5 kV/us.

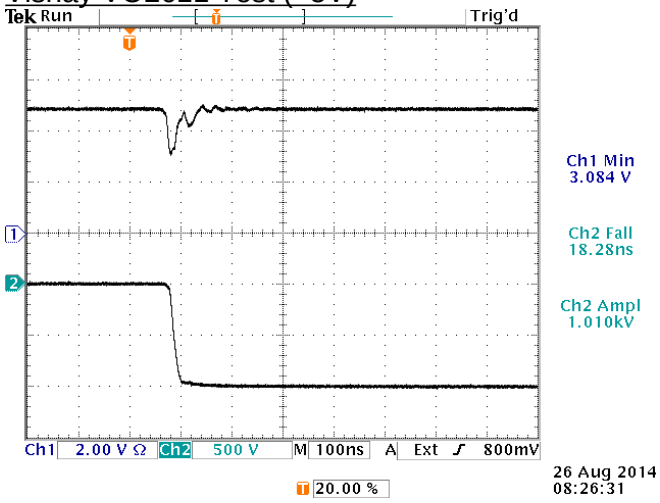
Vishay VO2611 Test (+5V)



+1kV, +5V, 7.5 mA, 348Ω load (“D7” PCB).

A glitch starts to occur at 1 kV × (90% - 10%) / 54.26 ns = 14.7 kV/us, which is less than the 15 kV/us specification.

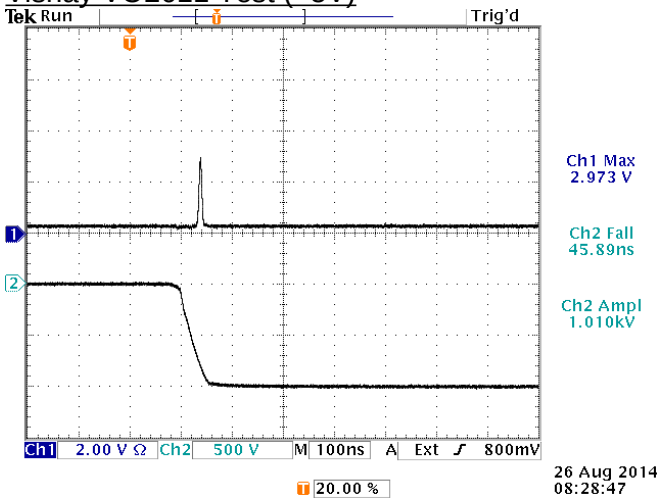
Vishay VO2611 Test (+5V)



-1kV, +5V, 0 mA, 348Ω load (“A” PCB).

The glitch at minimum risetime does not dip below 50%, so the CMTI exceeds (1kV × (90% - 10%) / 18.28 ns) = 43.7 kV/us.

Vishay VO2611 Test (+5V)



-1kV, +5V, 7.5 mA, 348Ω load (“D7” PCB).

A glitch starts to occur at 1 kV × (90% - 10%) / 45.89 ns = 17.4 kV/us.