

**Table 27 - I-V requirements for differential impedance, common mode impedance, and  $V_{BIAS}$  tests**

Values (see figure 45)	Differential impedance and $V_{BIAS}$ tests <sup>a</sup> (see figure 44)	Common mode impedance and $V_{BIAS}$ tests (see figure 46)
$V_1$ (mV)	n/a	1125
$V_2$ (mV)	n/a	1375
$I_1$ (mA)	1,0	n/a
$I_2$ (mA)	1,1	n/a
$V_3$ (V)	1,0	2,0
$V_4$ (V)	-1,0	0,5
$I_{MAX}$ (mA)	9,00 <sup>d</sup>	N/A
$I_{MIN}$ (mA)	-11,25 <sup>d</sup>	N/A
$S_1$ ( $\Omega$ )	50 to 125 <sup>b</sup>	75 to 100 <sup>c</sup>
$S_2$ ( $\Omega$ )	60 to 135 <sup>b</sup>	300 to 400 <sup>c</sup>
Measurement	D.C.	D.C.
<sup>a</sup> $V_A + V_B = 2,5 \pm 0,2$ V (see figure 44) <sup>b</sup> The differential impedances of $S_1$ and $S_2$ shall be set to any value from 55 $\Omega$ to 130 $\Omega \pm 5 \Omega$ . The difference between $S_1$ and $S_2$ shall not be greater than 10 $\Omega$ across the 27 lines. The differential impedance shall be set to a nominal of 105 $\Omega$ if the system is not a closed system. <sup>c</sup> The common mode $S_1$ and $S_2$ impedances change with differential impedance changes such that the nominal $S_1$ (i.e., 100 $\Omega$ ) and nominal $S_2$ (i.e., 110 $\Omega$ ) differential is an $S_1$ common mode of 100 $\Omega$ and an $S_2$ common mode of 300 $\Omega$ . <sup>d</sup> $I_{MAX}$ and $I_{MIN}$ are measured at the nominal differential impedance where $S_1$ is 100 $\Omega$ and $S_2$ is 110 $\Omega$ .		

Note <sup>b</sup> is confusing, the step accuracy is +/- 5  $\Omega$ . If a terminator is set to 55  $\Omega$  the nominal value is anywhere from 50 to 60  $\Omega$ , then all 27 lines of the terminator are within 10  $\Omega$ . This means a terminator set to 55  $\Omega$  and the nominal is 60  $\Omega$ , the lines are from 55 to 65  $\Omega$ , if the nominal were 50  $\Omega$  the lines are from 45 to 55  $\Omega$ .

Editorial; note <sup>b</sup> 130 is in the Symbol Font.

