Cascade

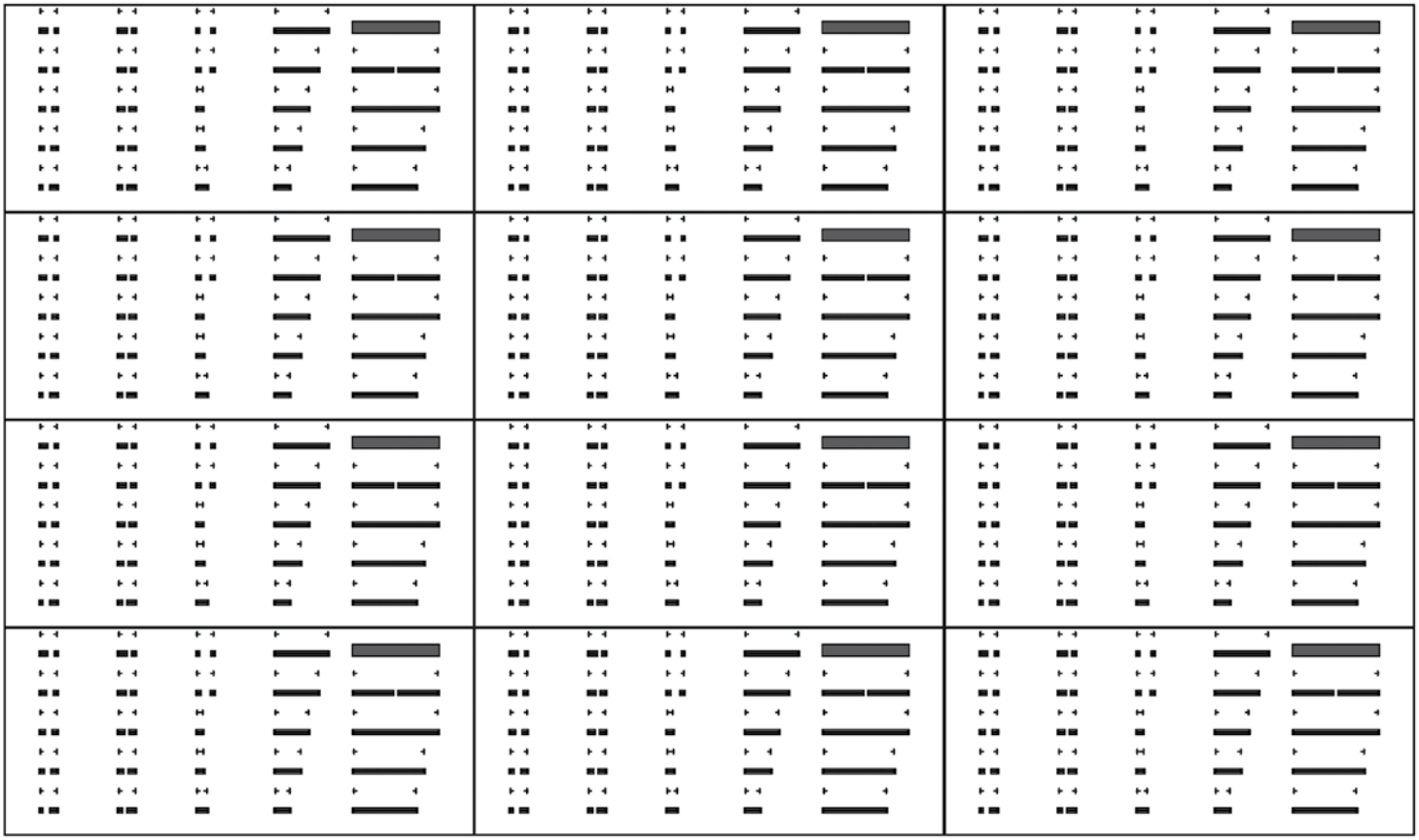
Impedance Standard Substrate Map

Multiline TRL Calibration

Pitch: 25 µm, **Frequency:** WR-1.0 – WR-5.1, **Configuration:** Ground-Signal-Ground

P/N: 172-885

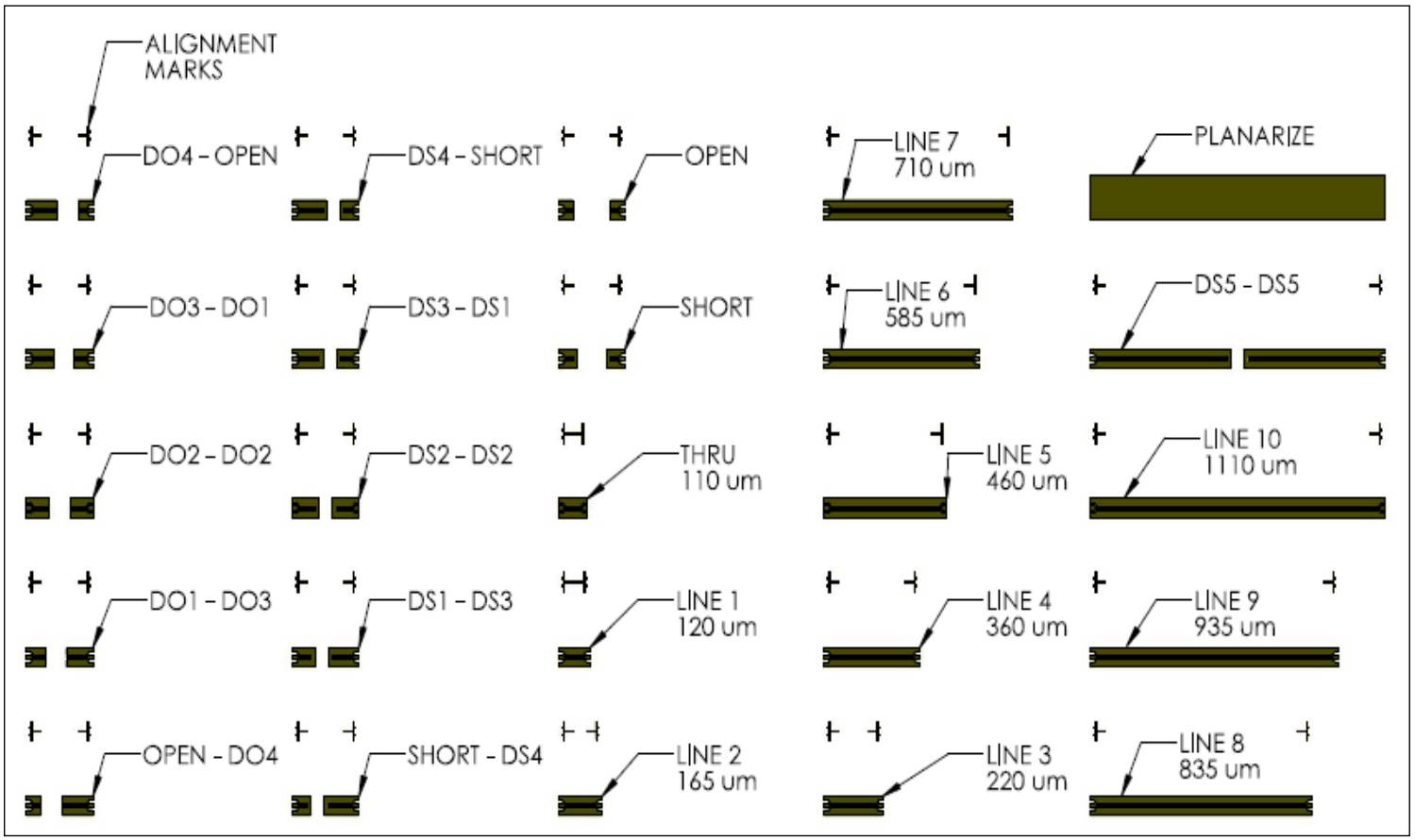
S/N:



Calibration Sites: 12 **Site Spacing:** 6000 µm x 2650 µm

Key to Map

West Probe Fixed Index Step: 1000 µm x 500 µm, **Alignment Mark Offset:** 250 µm Step North



Note: Line lengths are specified as conductor edge-to-edge dimension.

SPECIFICATIONS

Substrate Material: High-resistivity Silicon, **Substrate Thickness:** 275 µm
Dielectric Constant: 11.8, **Nominal Line Z_0:** 50 Ohm

OVERTRAVEL AND ALIGNMENT

Prior to contacting the calibration standards, alignment and overtravel should be set using the alignment marks. On initial contact, the leading edge of the probe contacts should be aligned with the outmost edge “A” of the alignment mark, shown in Figure 1. To reach final contact, overtravel should be increased until the leading edge of the probe contacts is aligned with the innermost edge “B” of the alignment mark, shown in Figure 2.

Note: Calibration substrate must be mounted on an absorber material (such as ISS Holder P/N 116-344).

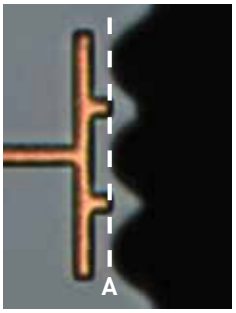


Figure 1: Initial contact

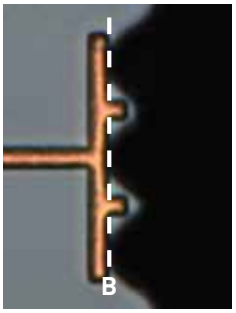


Figure 2: Final contact

Recommended Line Configurations

Band	**WR-1.0** (750 - 1100 GHz)	**WR-2.2** (325 - 500 GHz)	**WR-3.4** (220 - 330 GHz)	**WR-4.3** (170 - 260 GHz)	**WR-5.1** (140 - 220 GHz)
Lines	Thru	Thru	Thru	Thru	Thru
	Line 1	Line 2	Line 3	Line 3	Line 3
	Line 2	Line 4	Line 5	Line 6	Line 7

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